

FIG. 1A

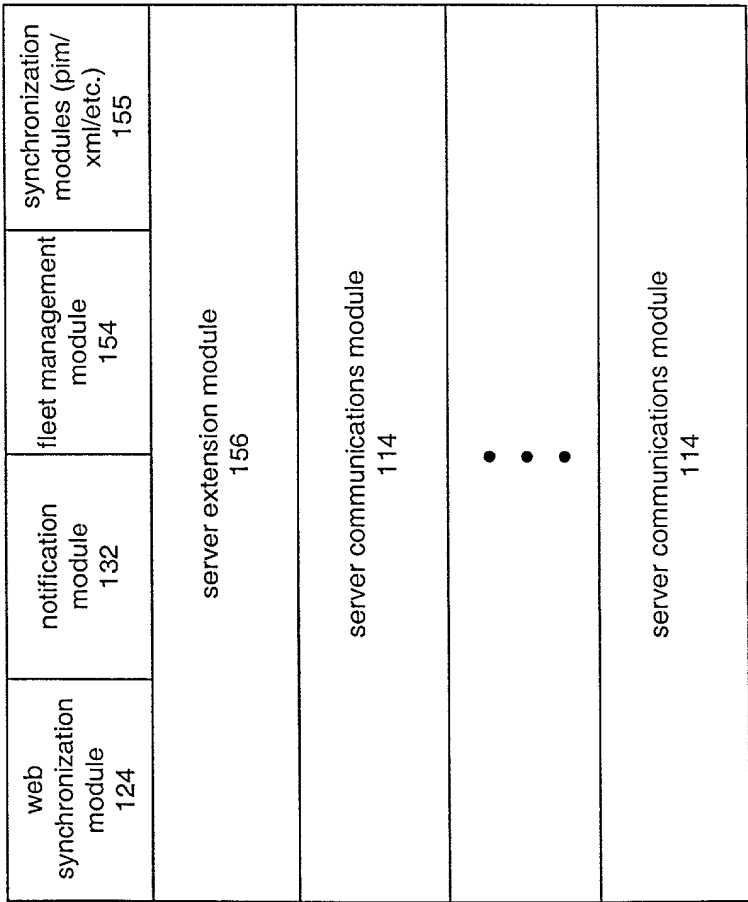
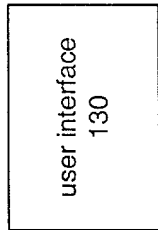
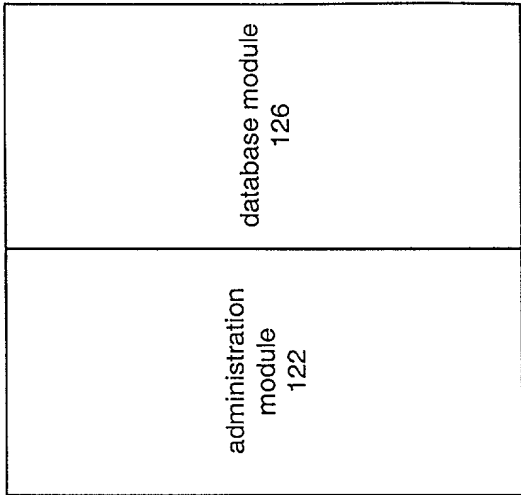
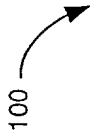


FIG. 1B

Data Processing Unit 103A

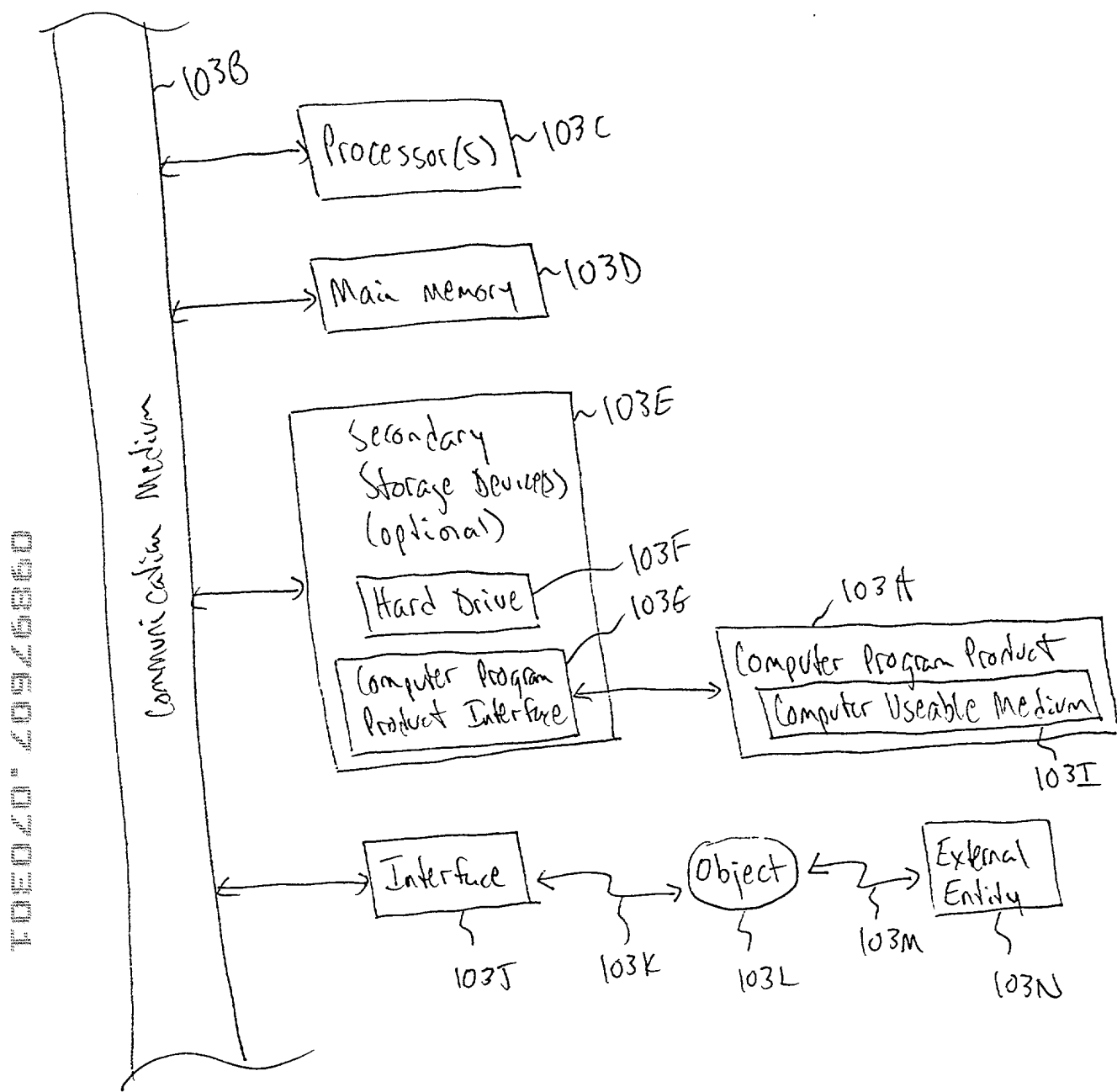
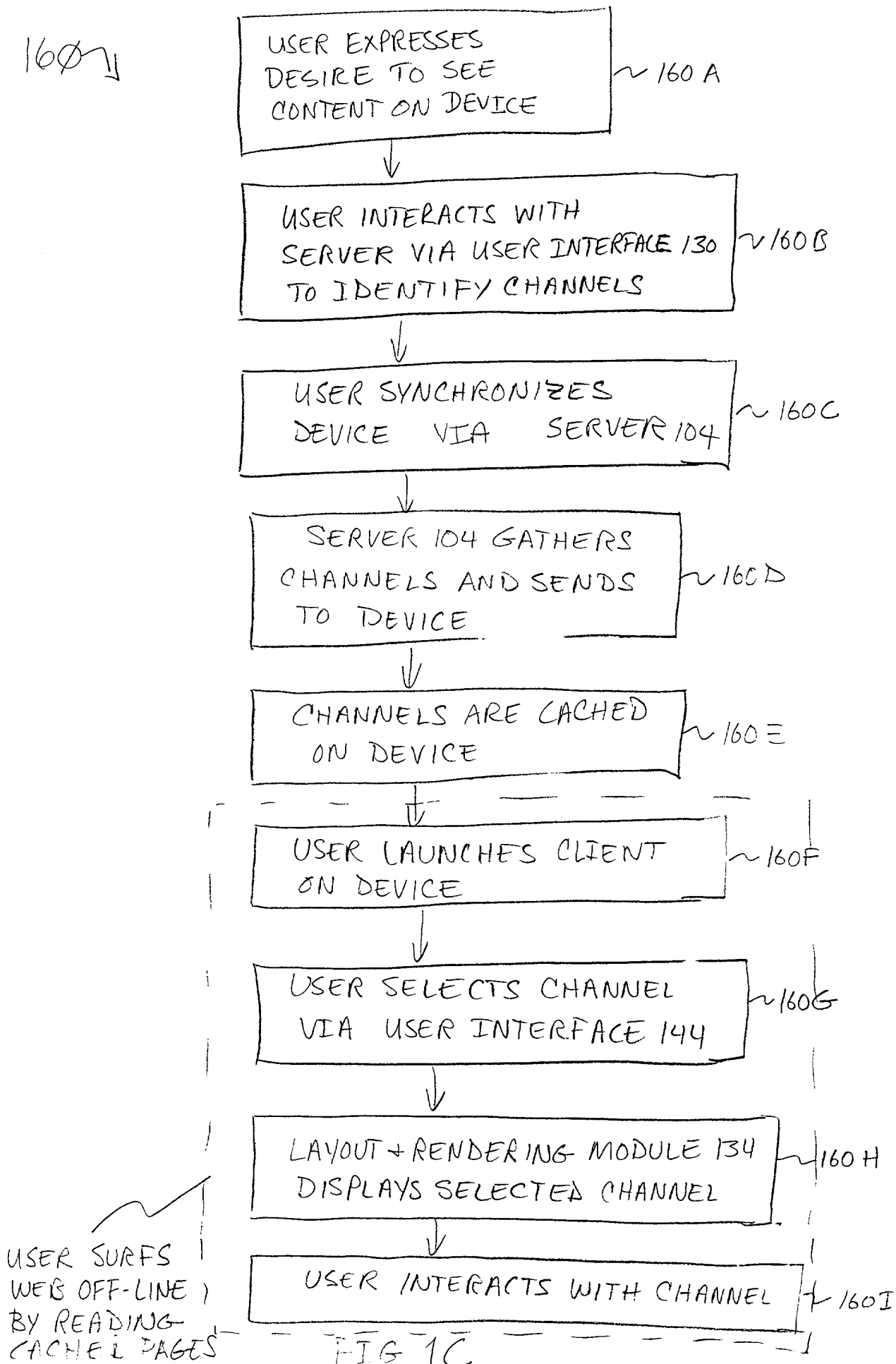


FIG. 1B1

09897607.070301



160 I'



USER ACCESSES A CHANNEL
CONTAINING A MULTIPLE
PAGE FORM

~164 A



USER INTERFACE 144 DISPLAYS
THE FIRST PAGE OF THE FORM

~164 B



USER ENTERS DATA/COMMANDS
INTO PAGE OF FORM DISPLAYED

~164 C



CLIENT EXTENSION INTERFACE 138
STORES DATA FROM DISPLAYED
PAGE OF FORM.

~164 D



USER INTERFACE 144 DISPLAYS THE
NEXT PAGE OF FORM

~164 E



CLIENT EXTENSION INTERFACE 138
DELIVERS COMPLETED MULTIPLE PAGE
FORM TO THE FORMS MODULE 136

~164 F



CONTROL MODULE 142 PROVIDES AN APPROPRIATE
NOTIFICATION

~164 G



FORMS MODULE 136 MAINTAINS/MANAGES
FORMS

~164 H

FIG. 1E

FIG. 1E

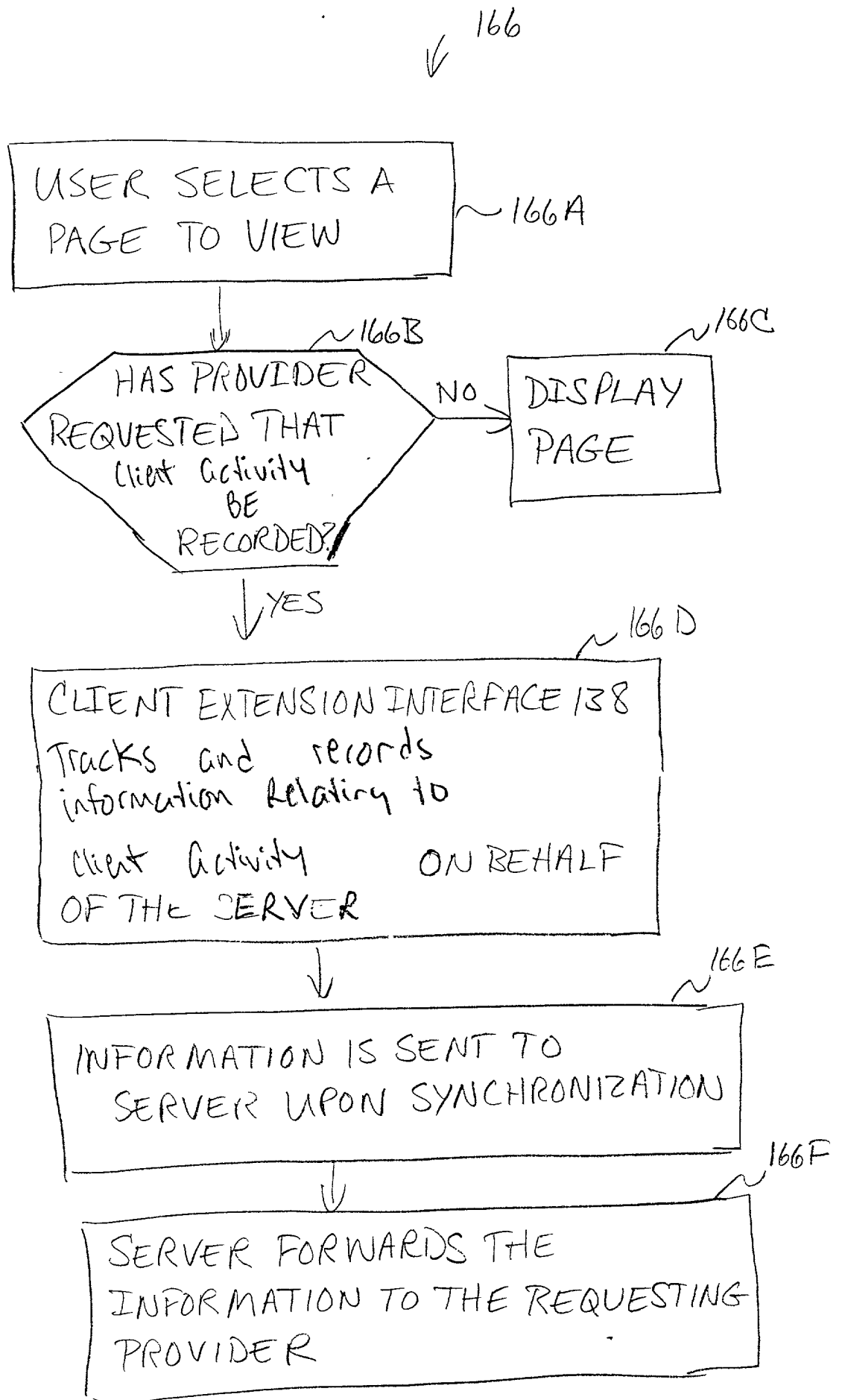


FIG. 1F1

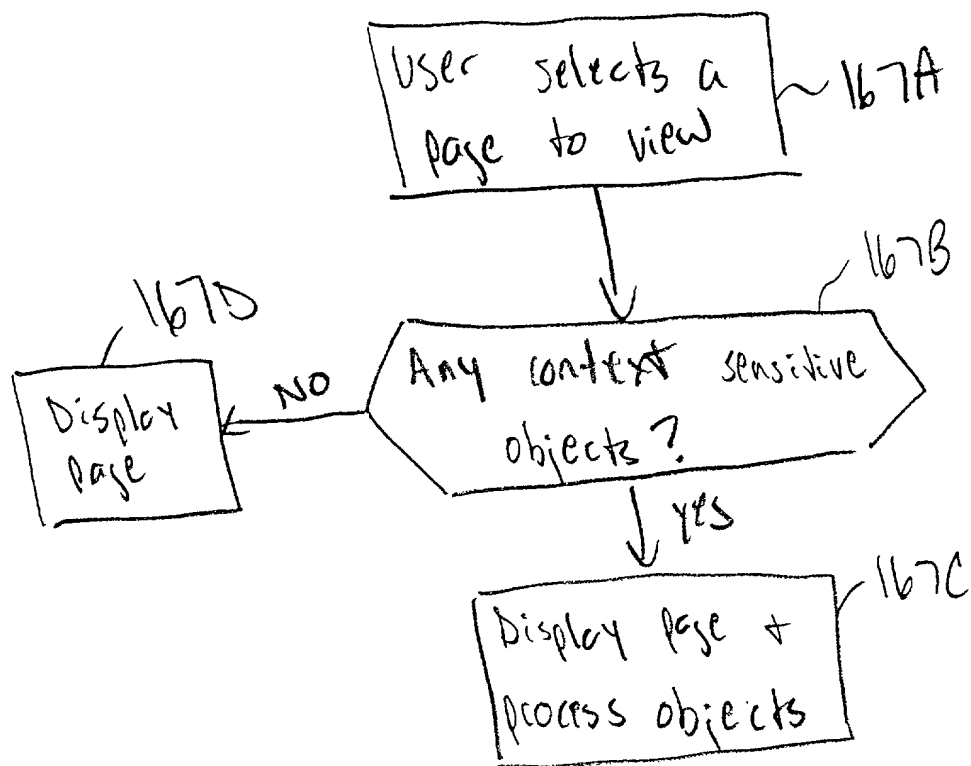


FIG. 1F2

1687

~ 168A
CLIENT INITIALIZES A SYNC
AND GIVES A SERVER A
NULL DATA MARKER

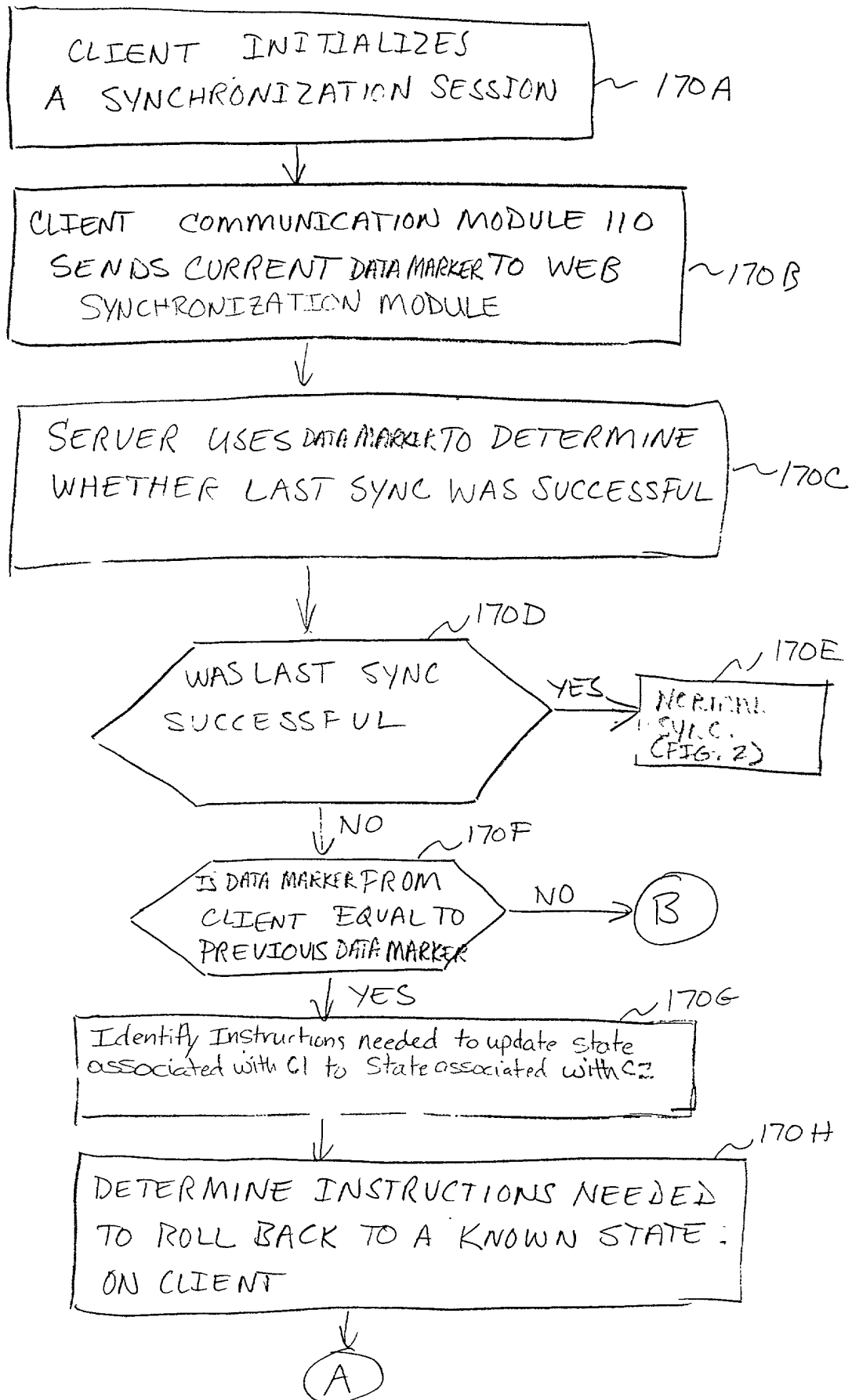


~ 168B
SERVER TELLS CLIENT WHICH
CLIENT DATABASES IT WISHES
TO TRACK AND SENDS DATA MARKER [C]

FIG. 1G

09897507.020301

1707



09897607.070304
T0E020.28926660

FIG. 1H1

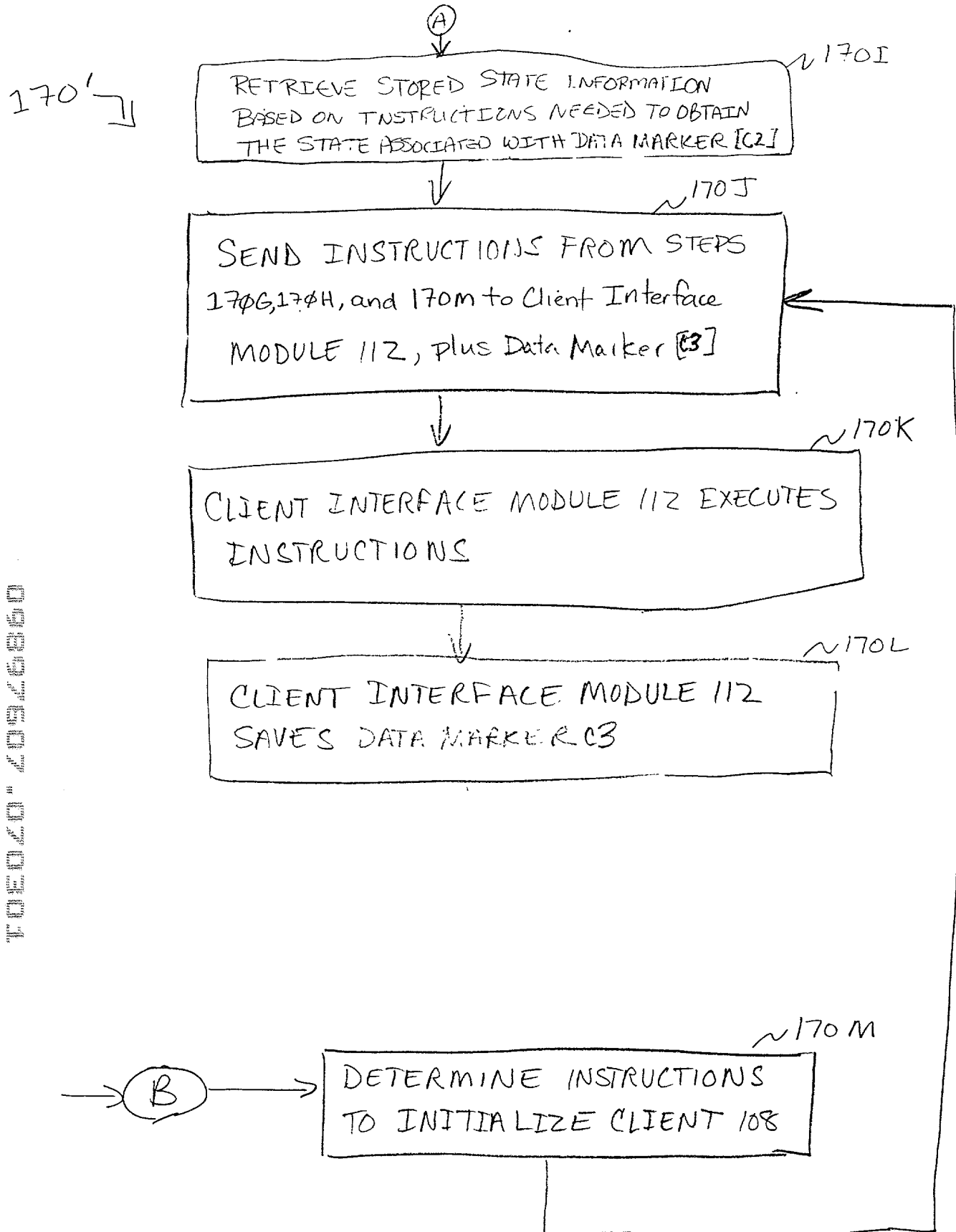


FIG. 1H2

09897507.070301

170E
~

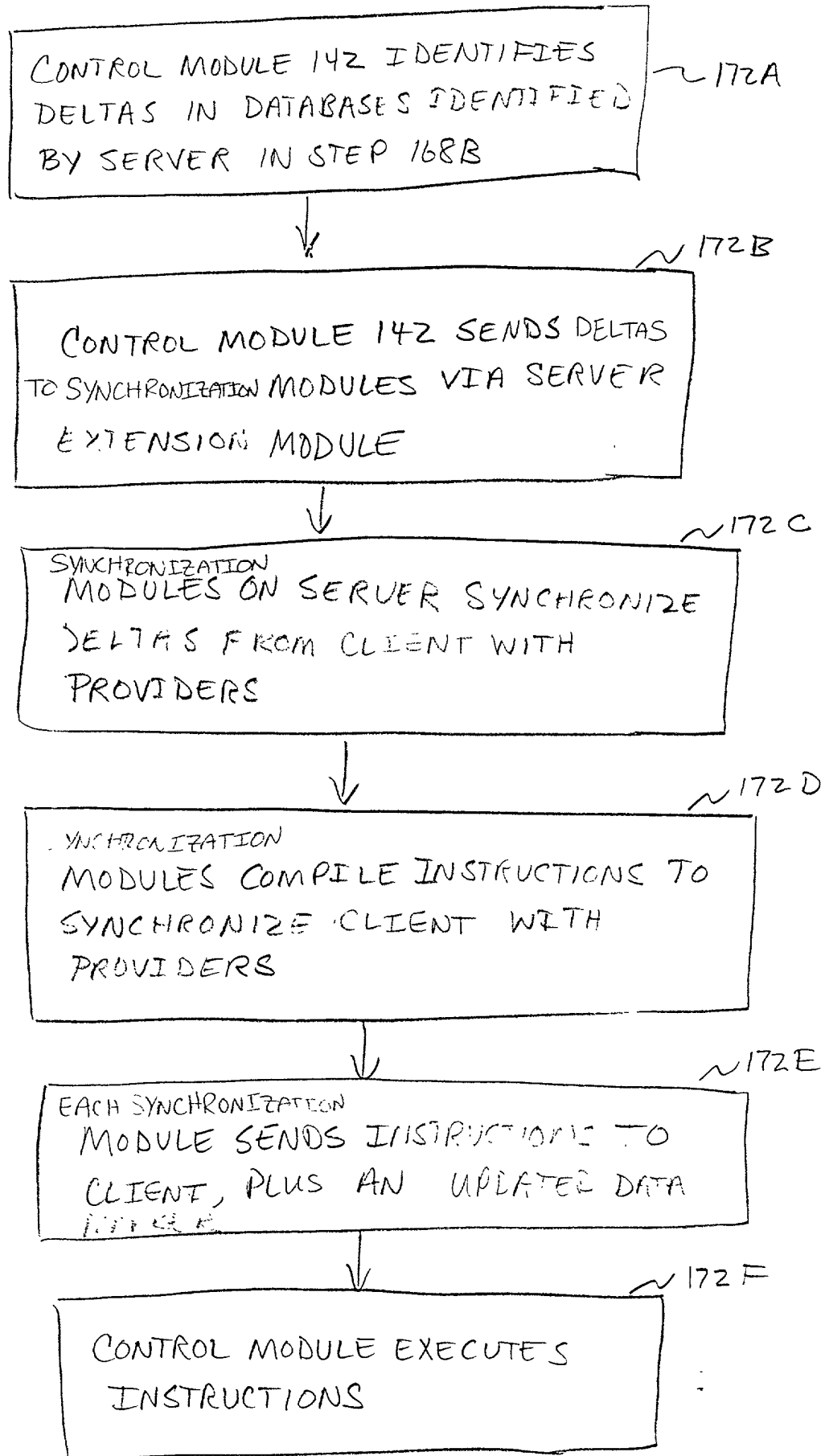


FIG. 1I1

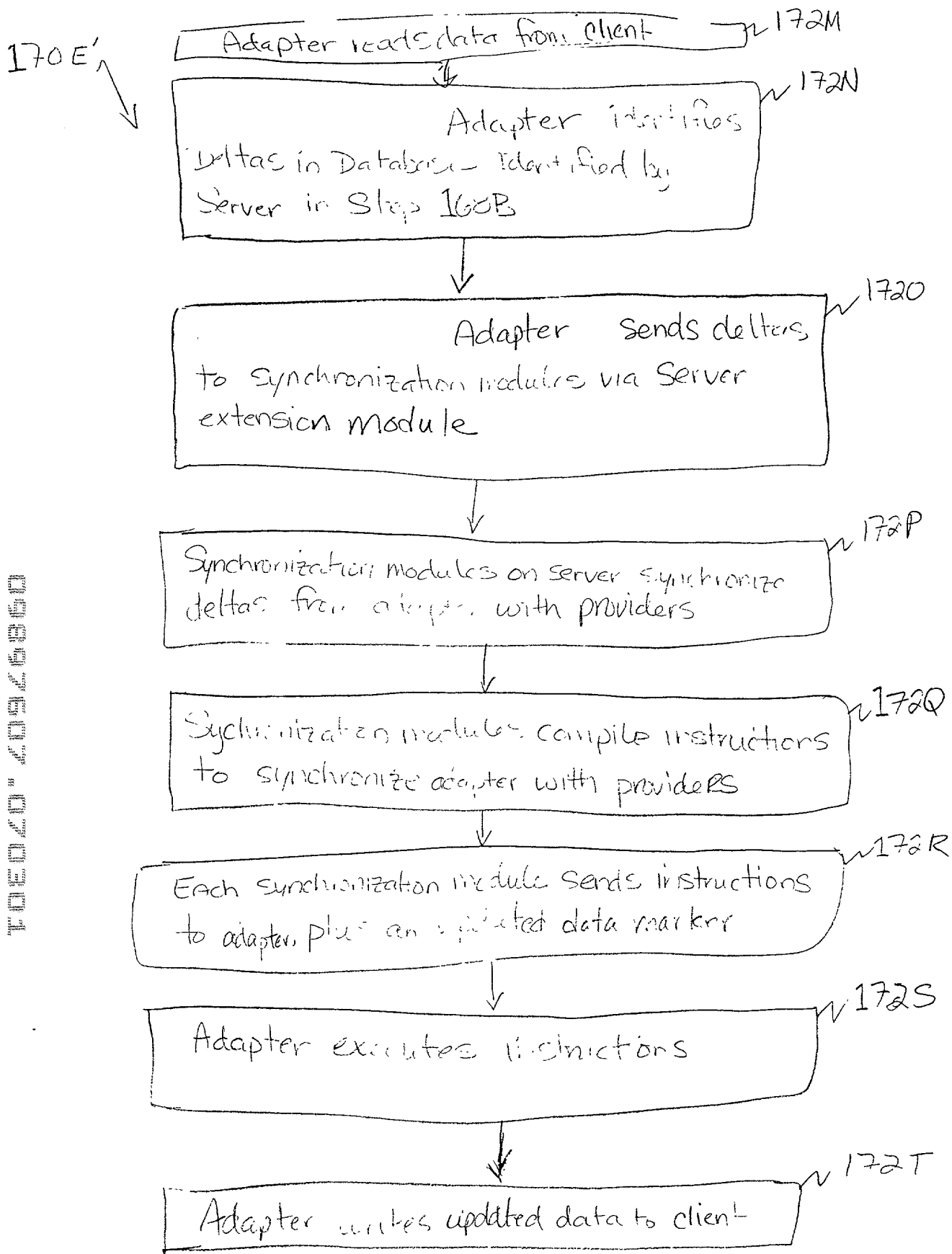


FIG. 112

FIG. 1J

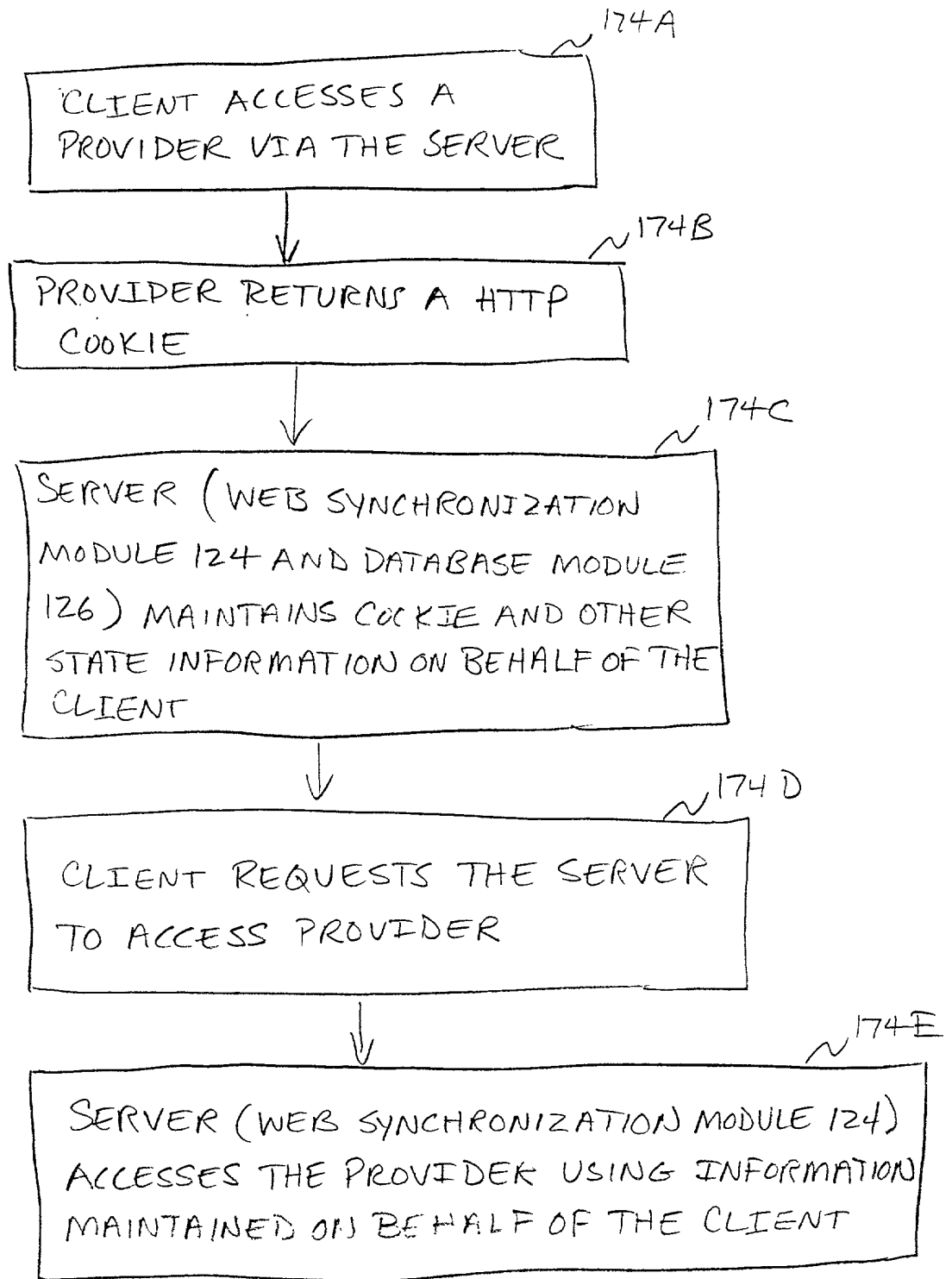


FIG. 1J

09897607.070301

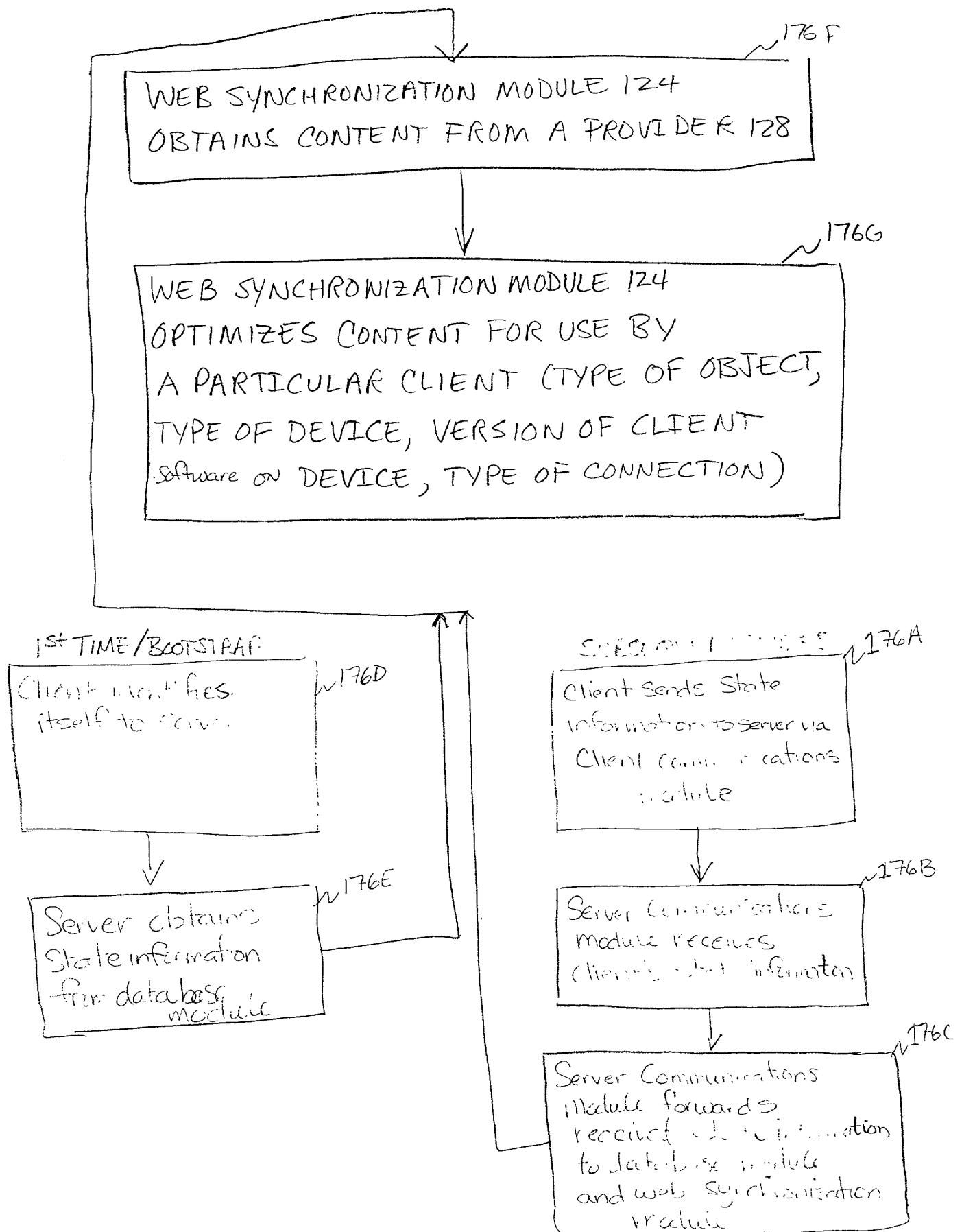
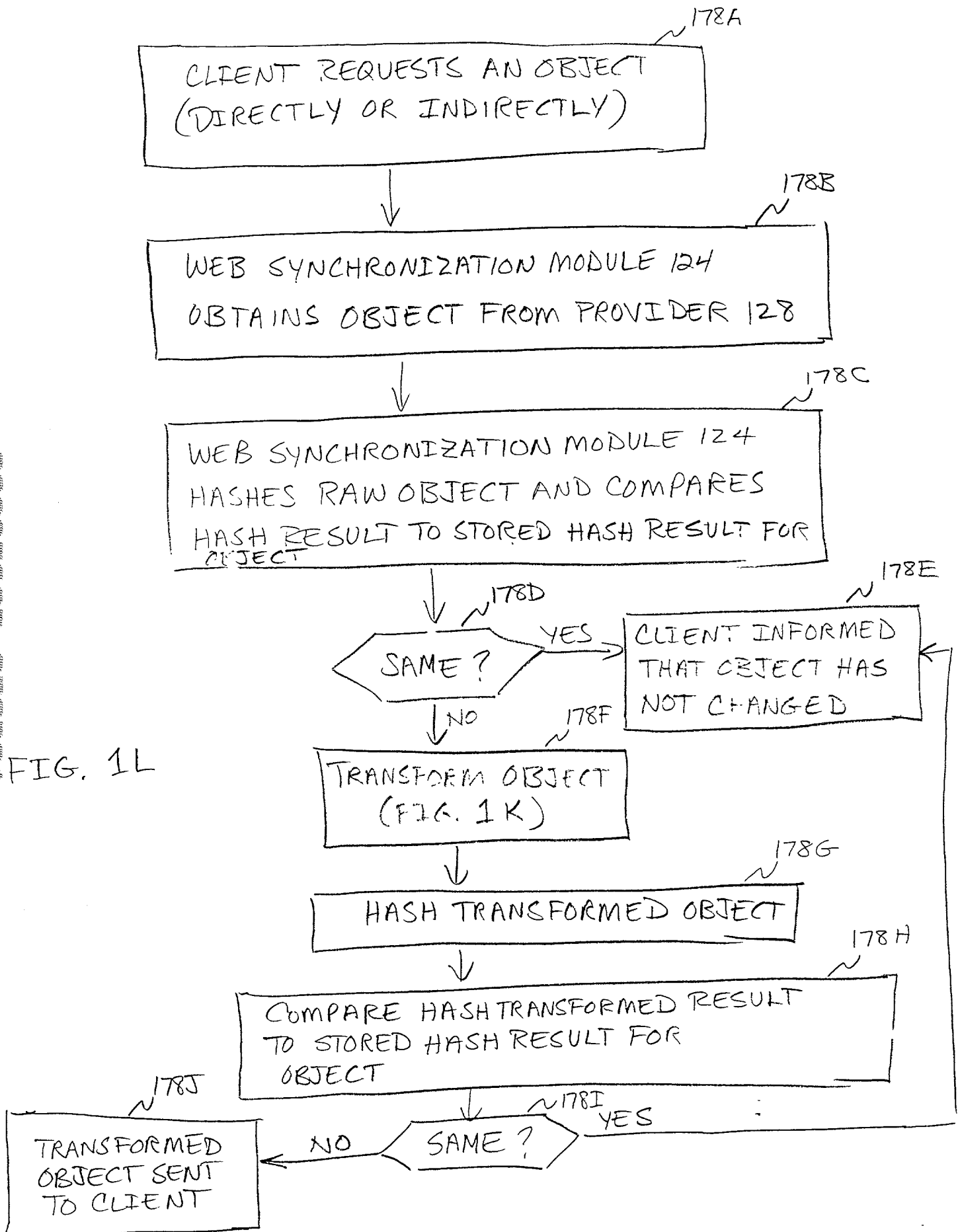
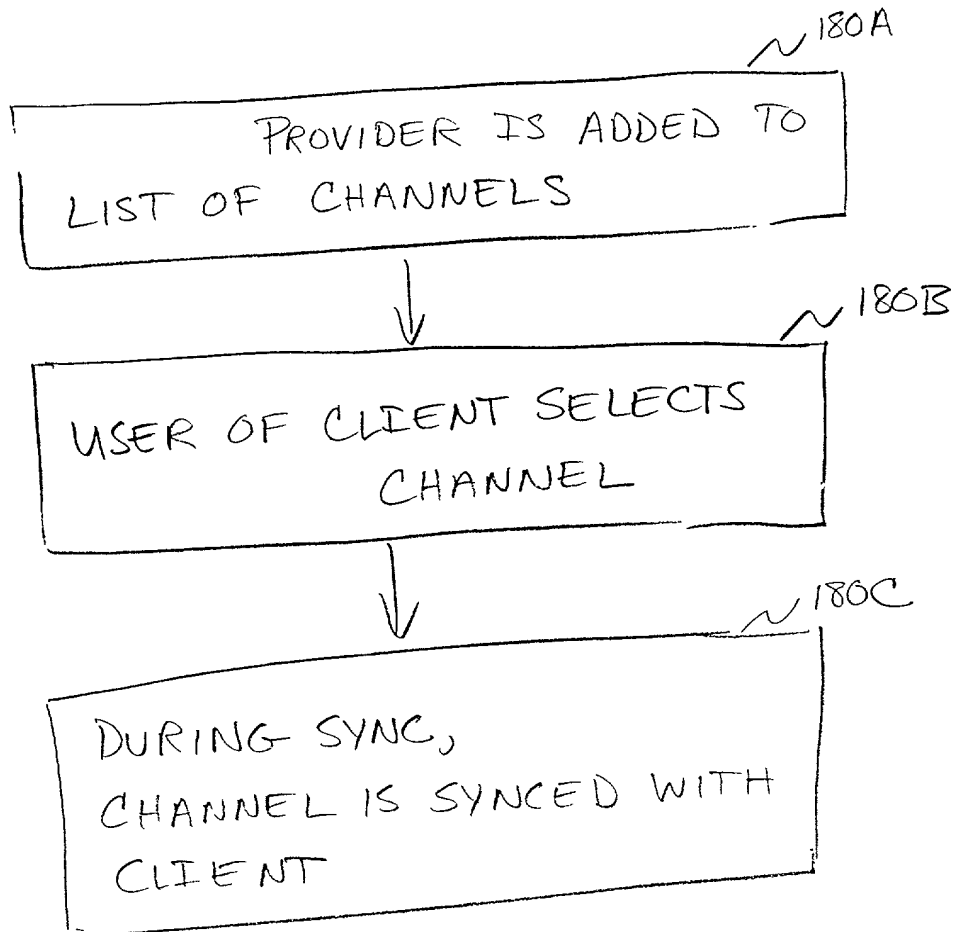


FIG. 1K





- MUSIC
- PHOTO ALBUMS
- BOOKS
- MOVIES
- ETC.

FIG. 1M

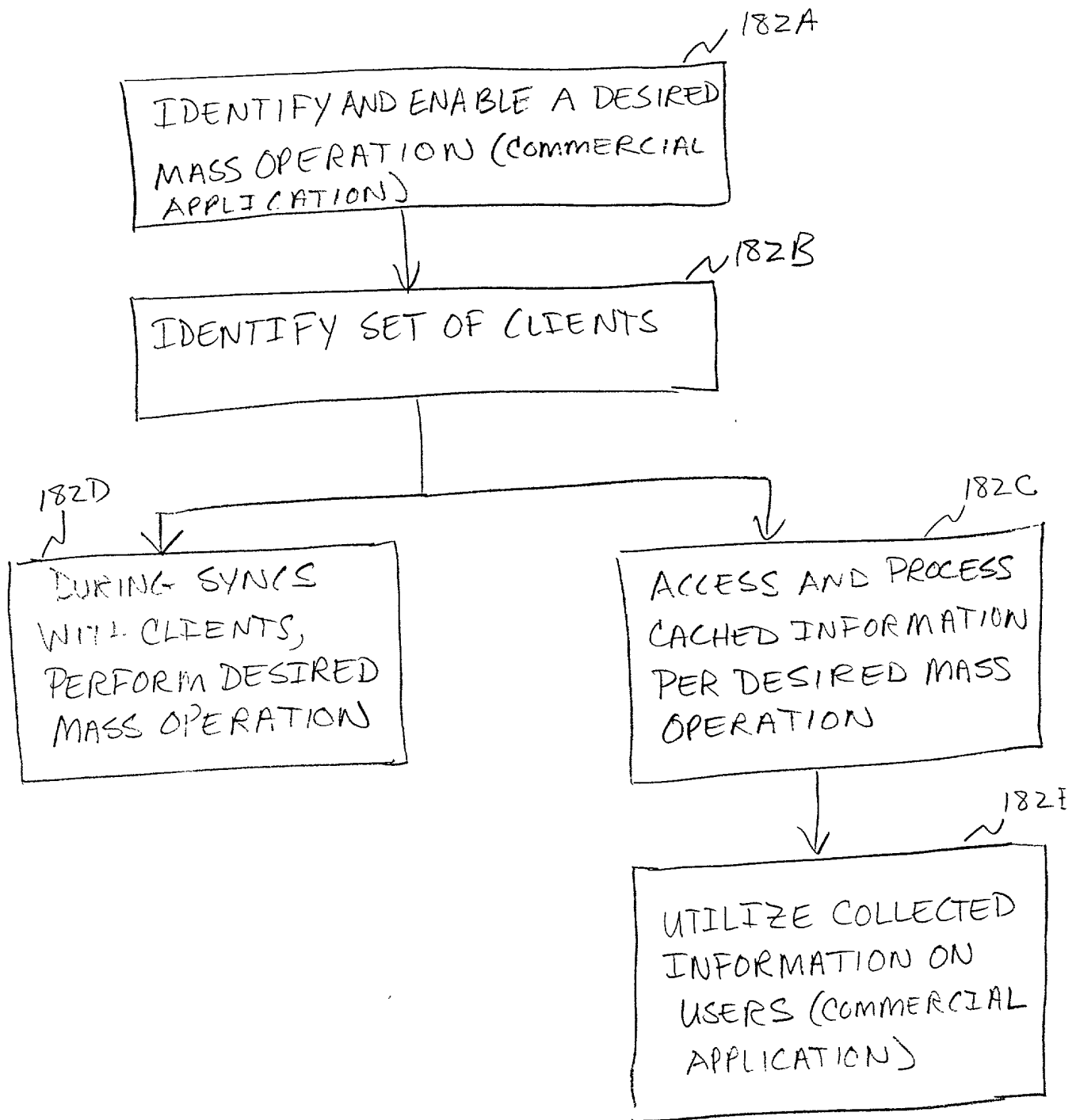
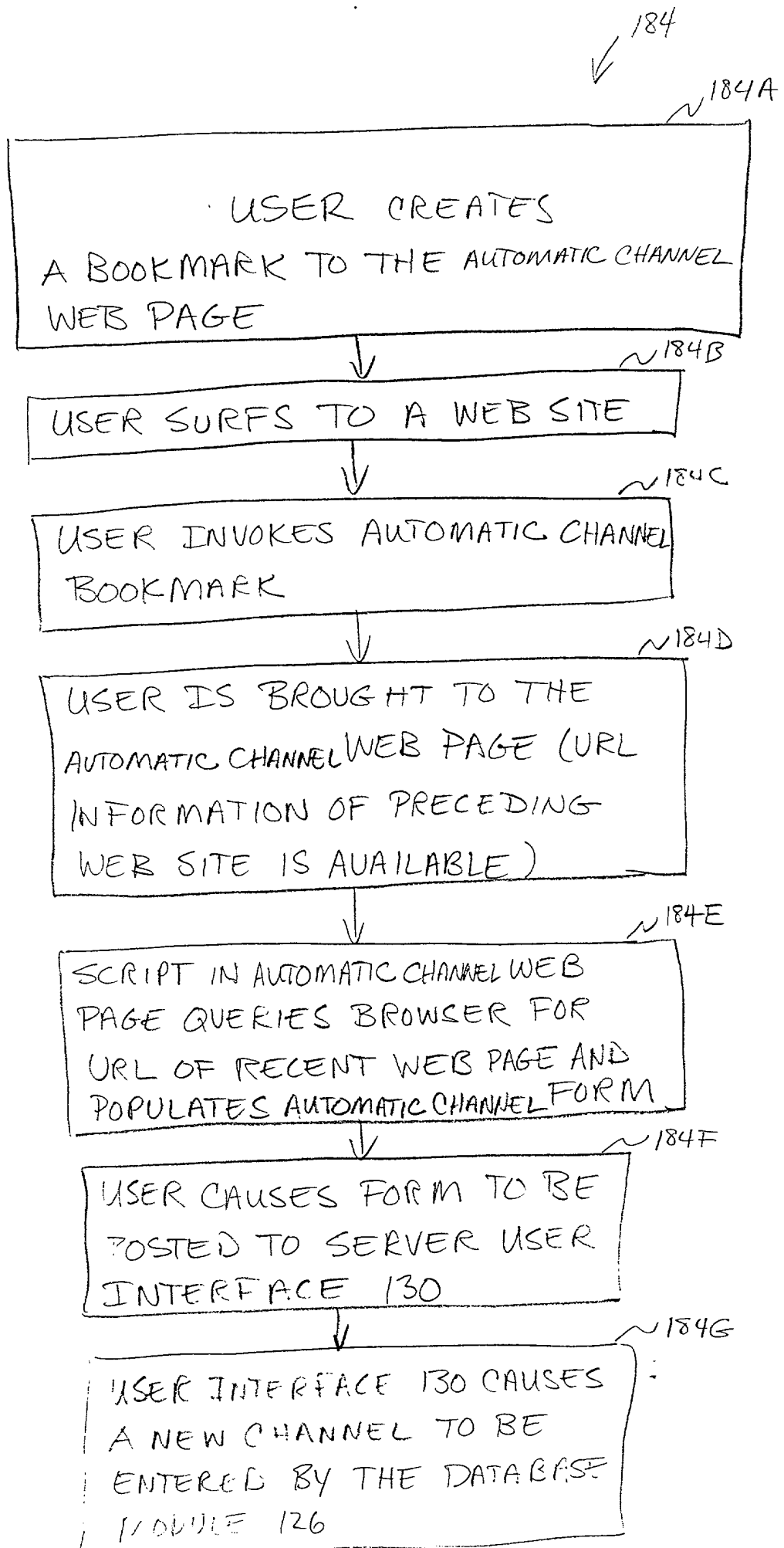


FIG. 1N



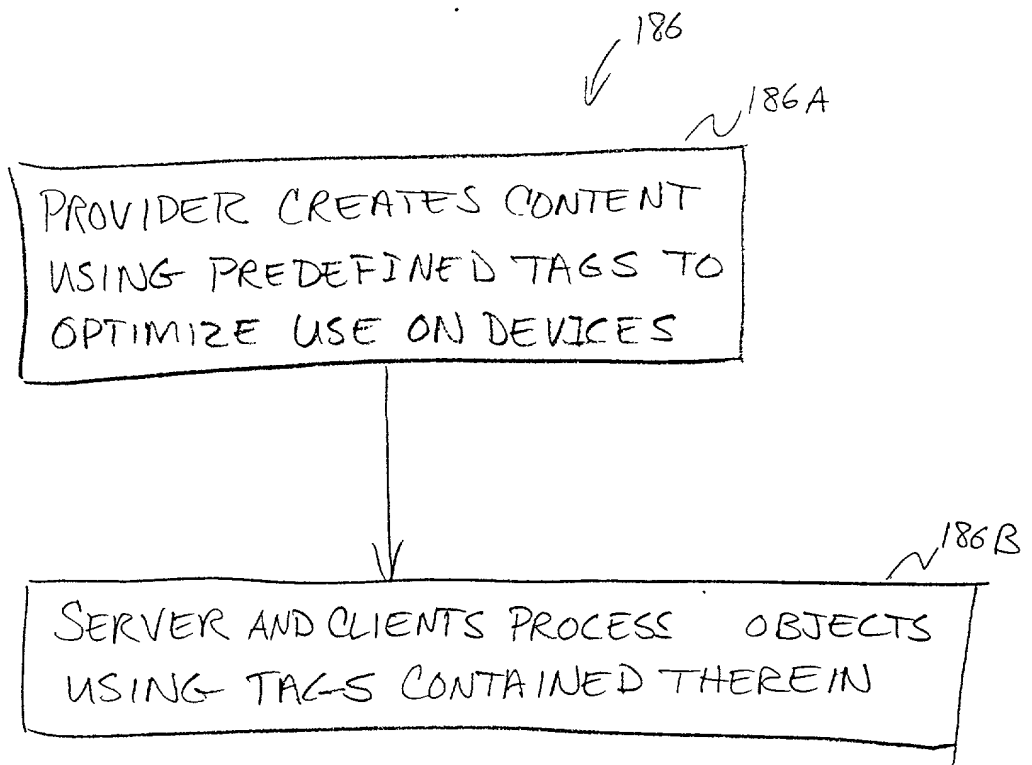


FIG. 1P

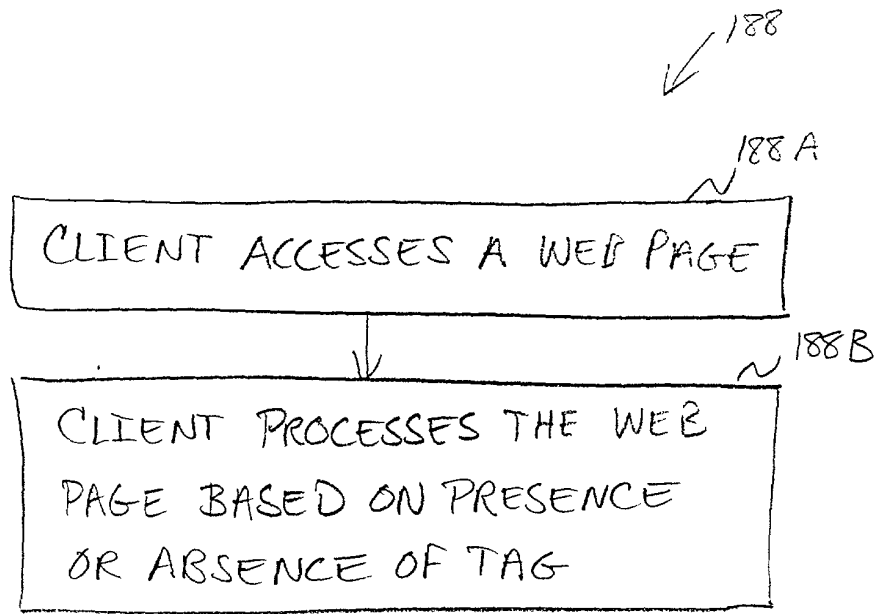


FIG. 1Q

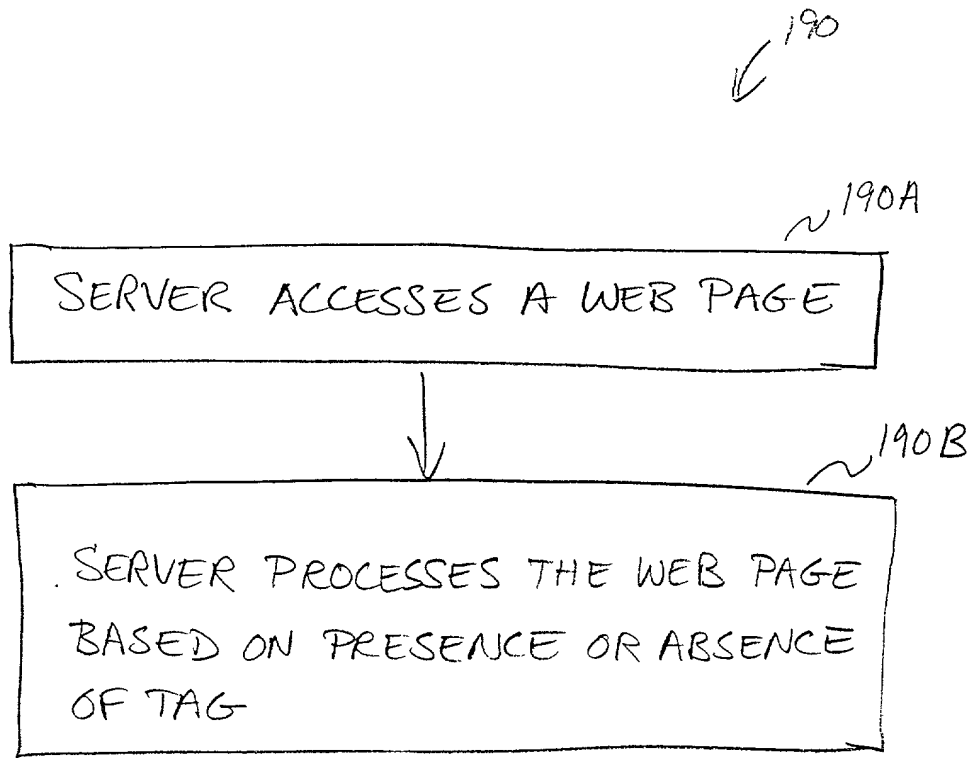


FIG. 1R

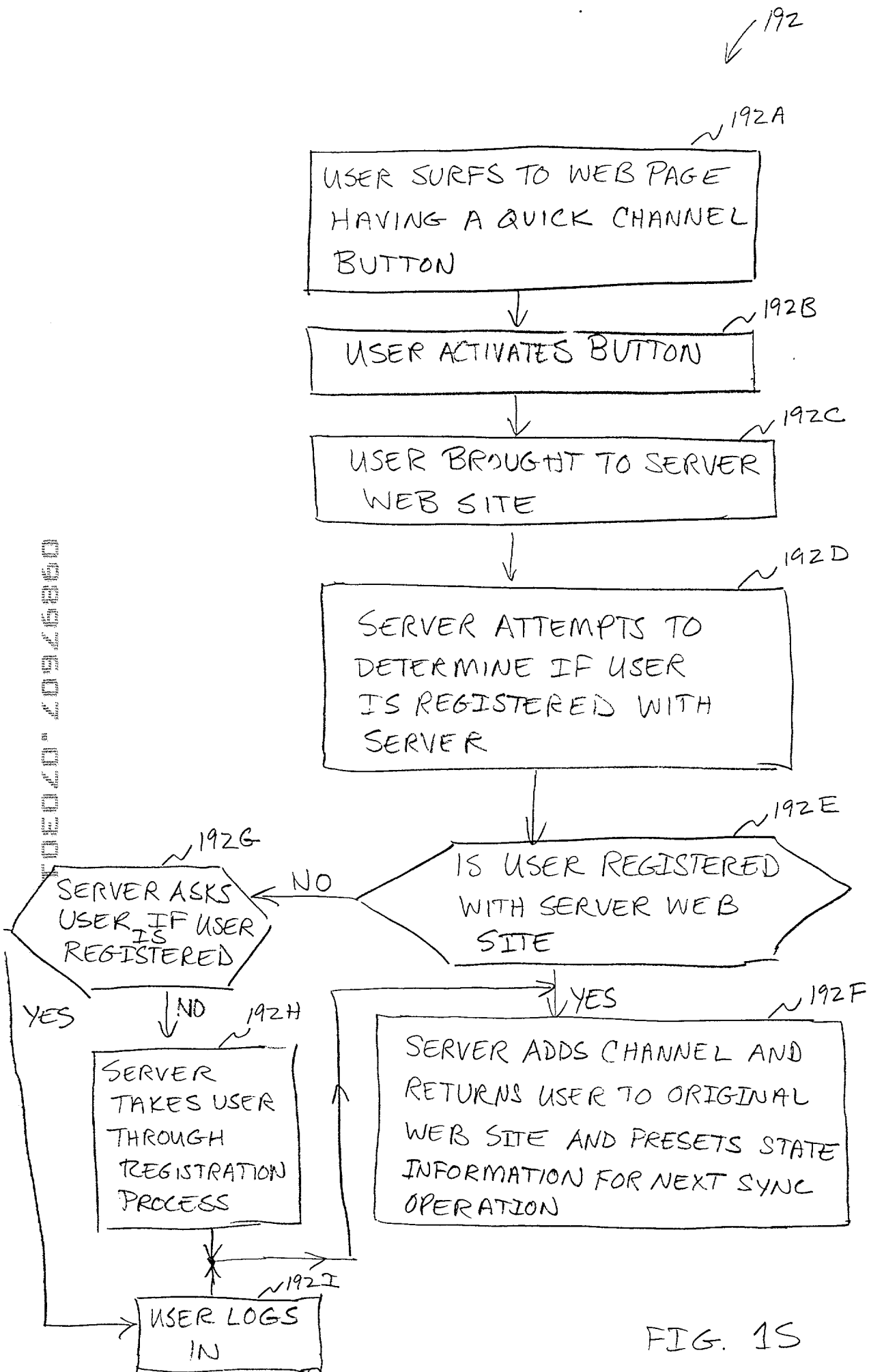


FIG. 15

FIG. 1T

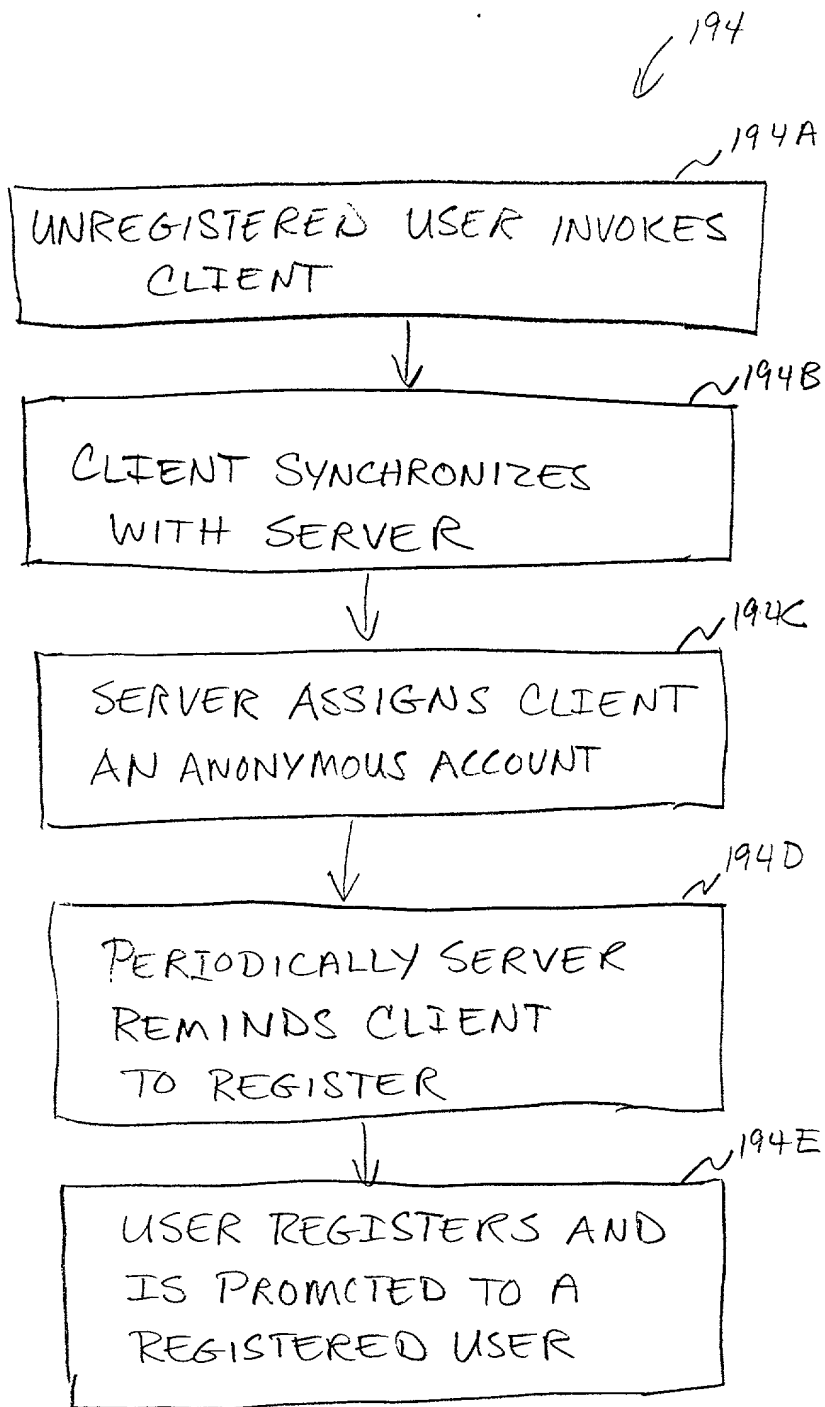


FIG. 1T

Core Technology: Placing Internet/
Intranet Content on Mobile Devices

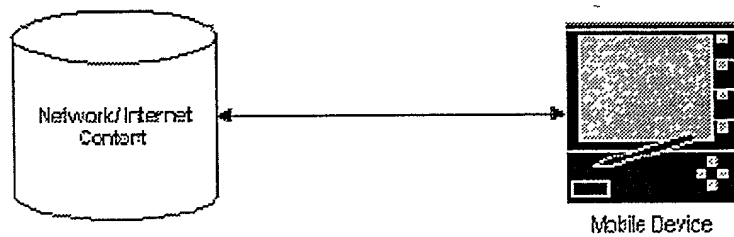


FIG. 1u

Mobile Device/Server Environment

Mobile Devices in a Client Server Environment

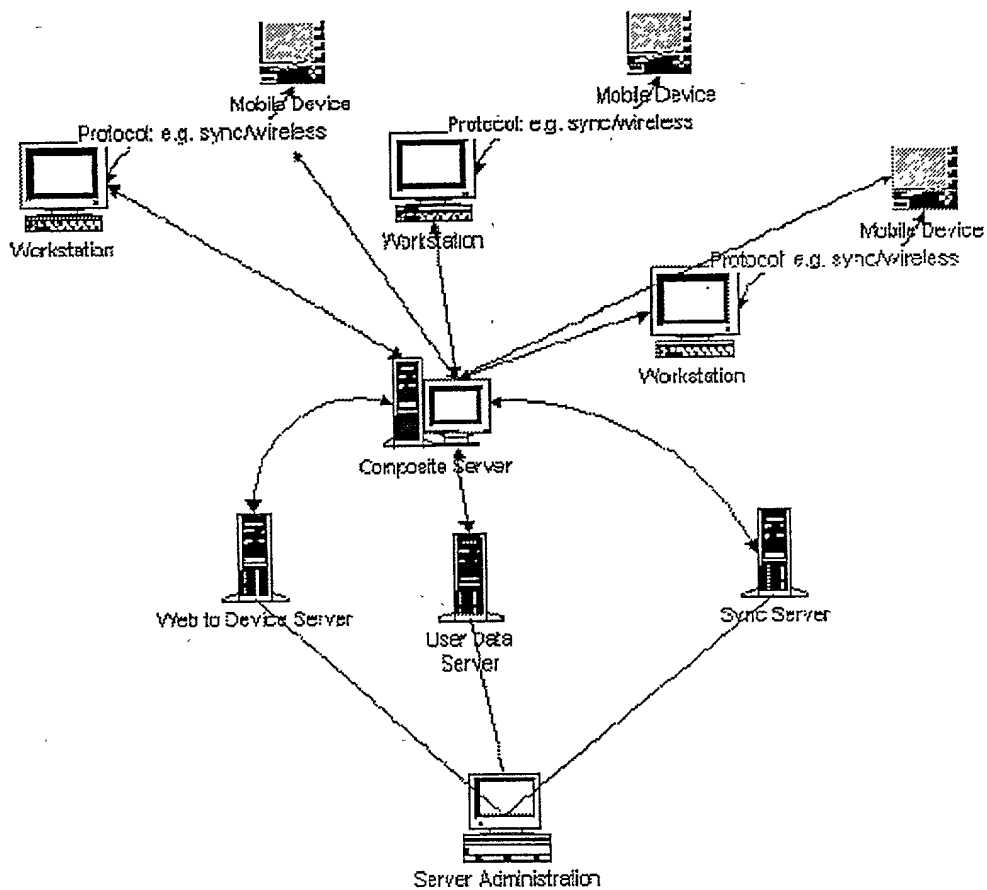


FIG. 1V

Downstream Protocol

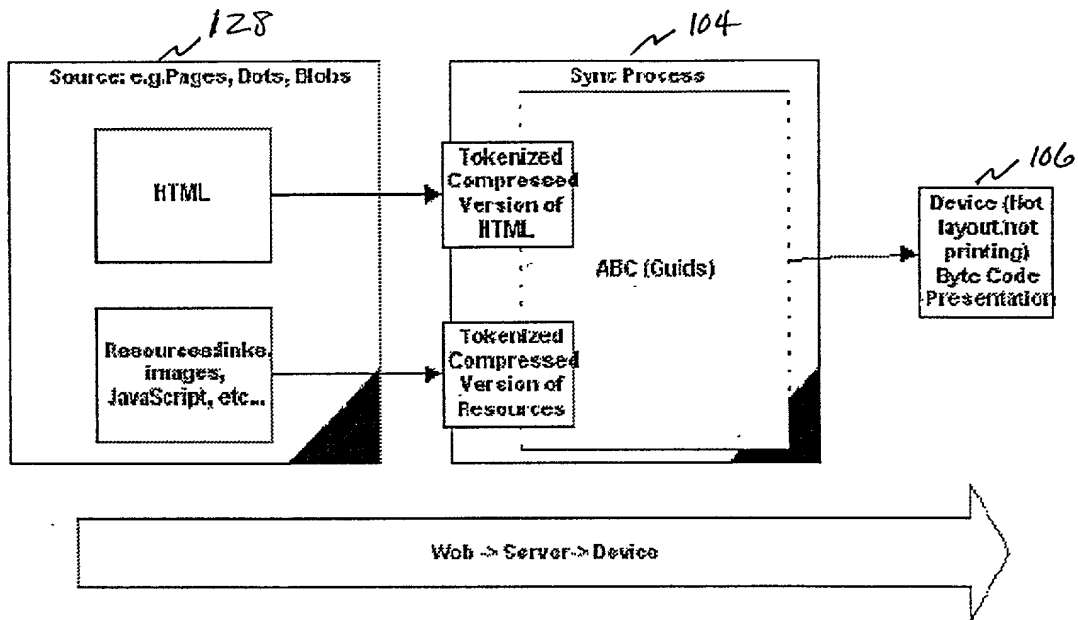


FIG. 1W

09897507-070301

One Up/One Down Sync

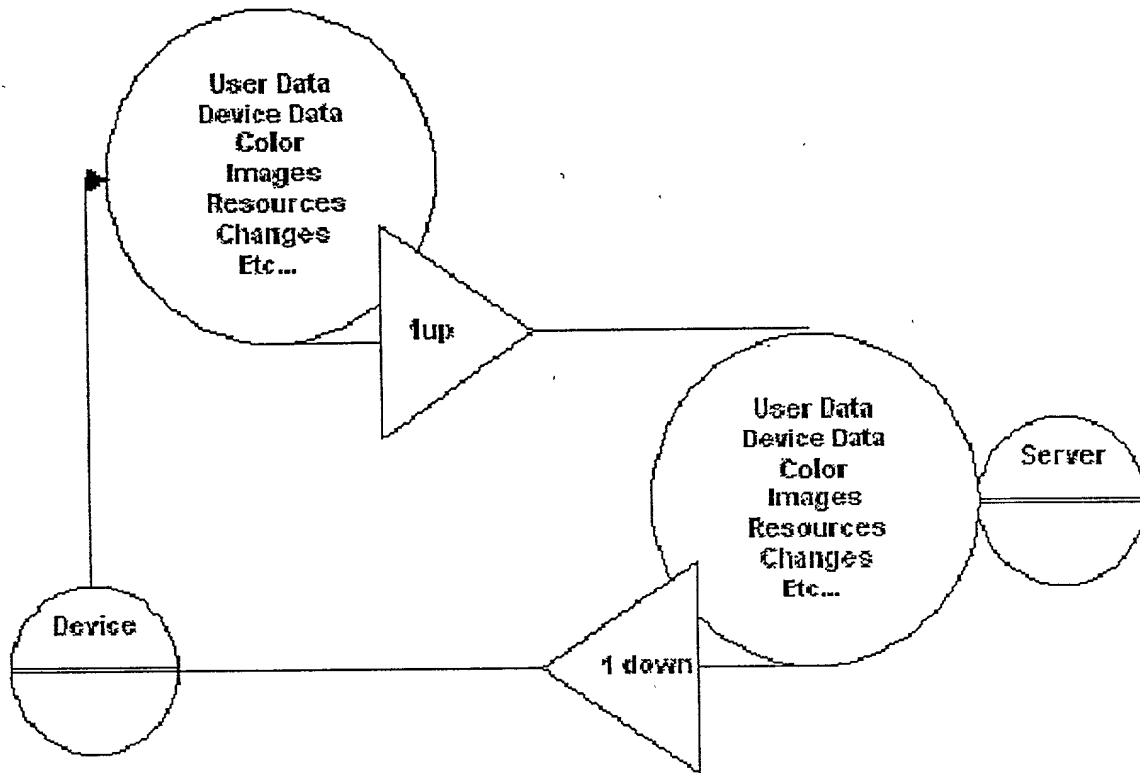


FIG. 1X

09897607-070301

Sync Process

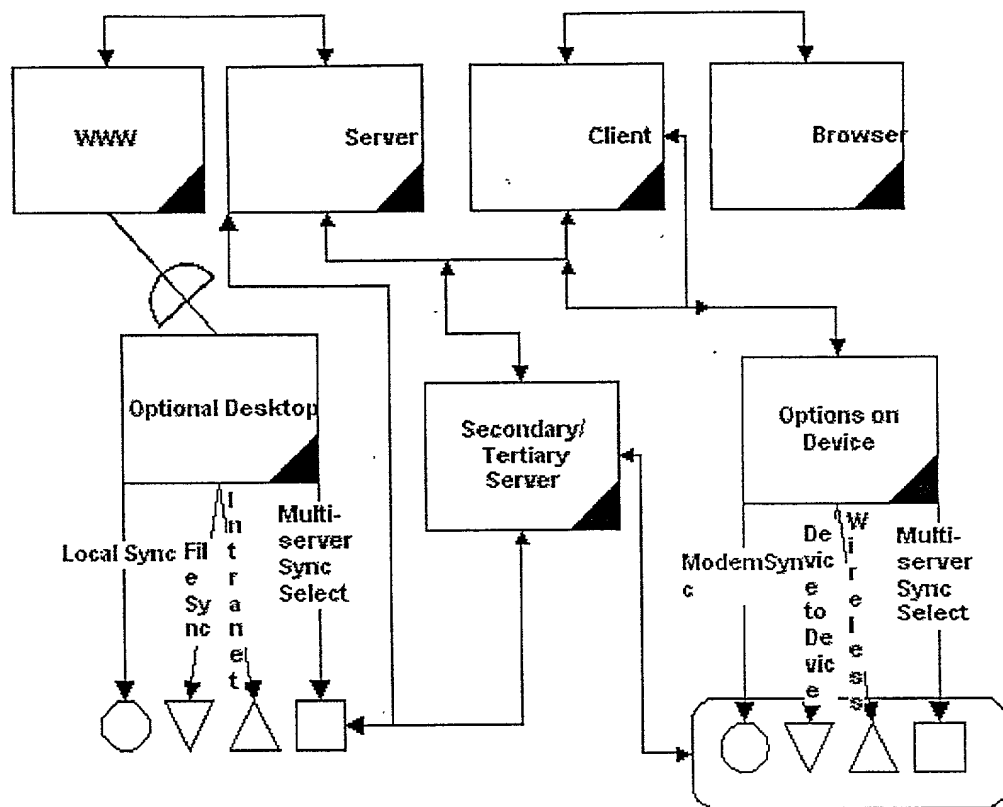


FIG. 14

Granular Variable Protocol

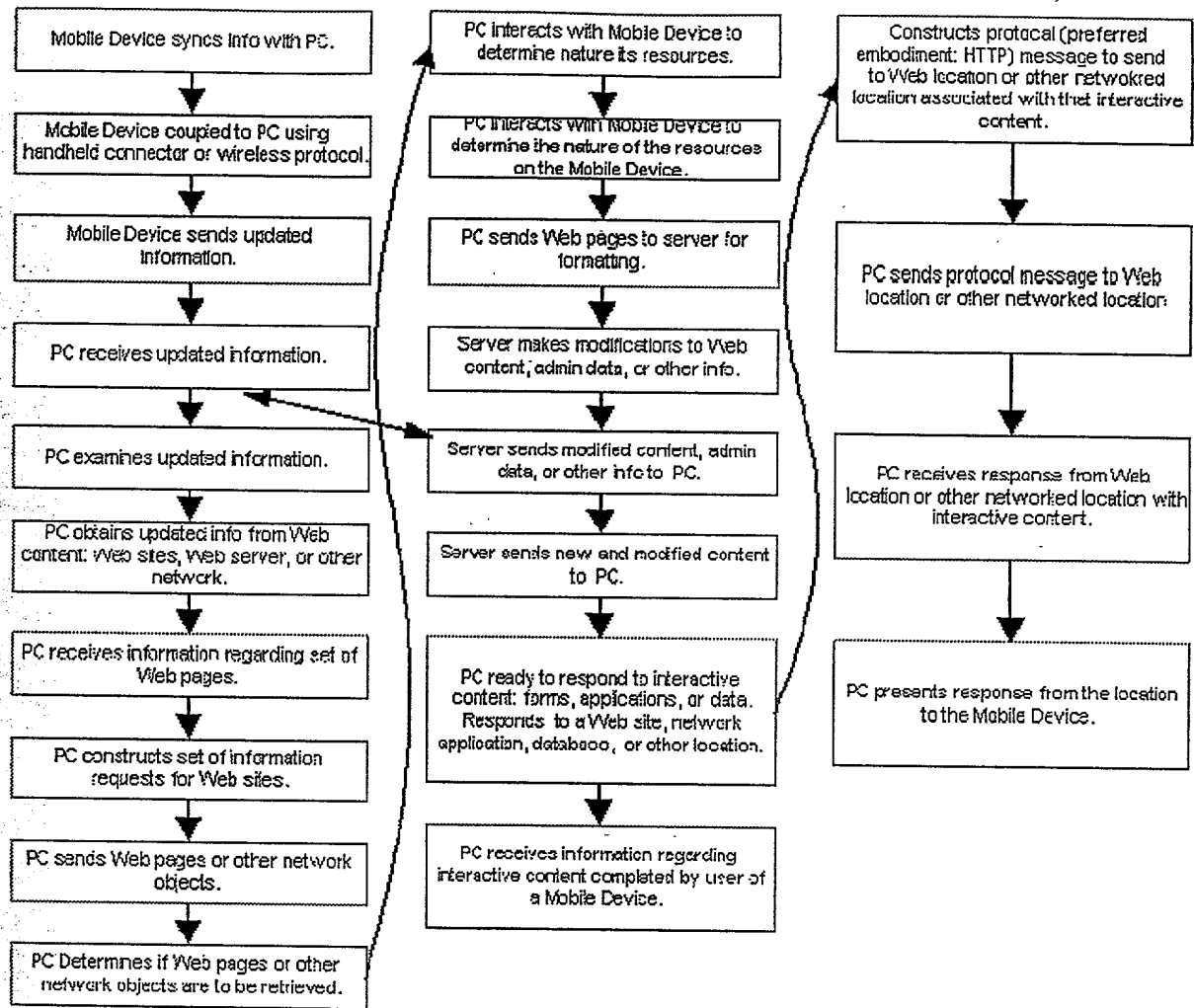


FIG. 17

Optimization: An Example

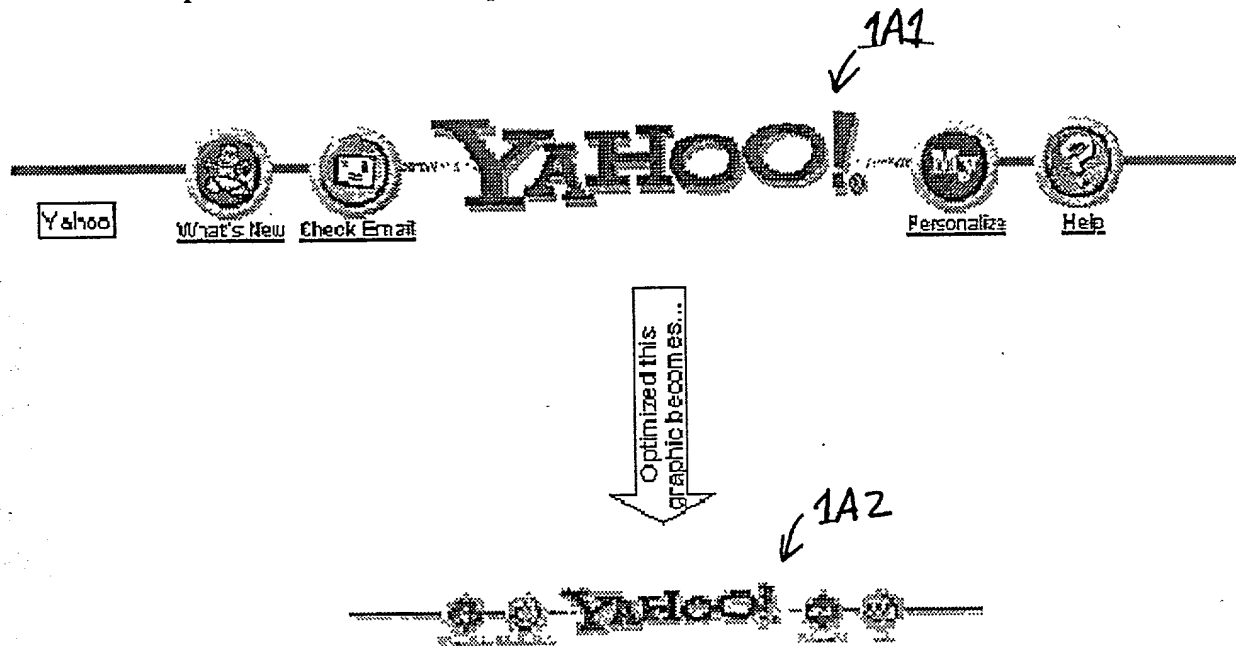


FIG. 1AA

099760-070301

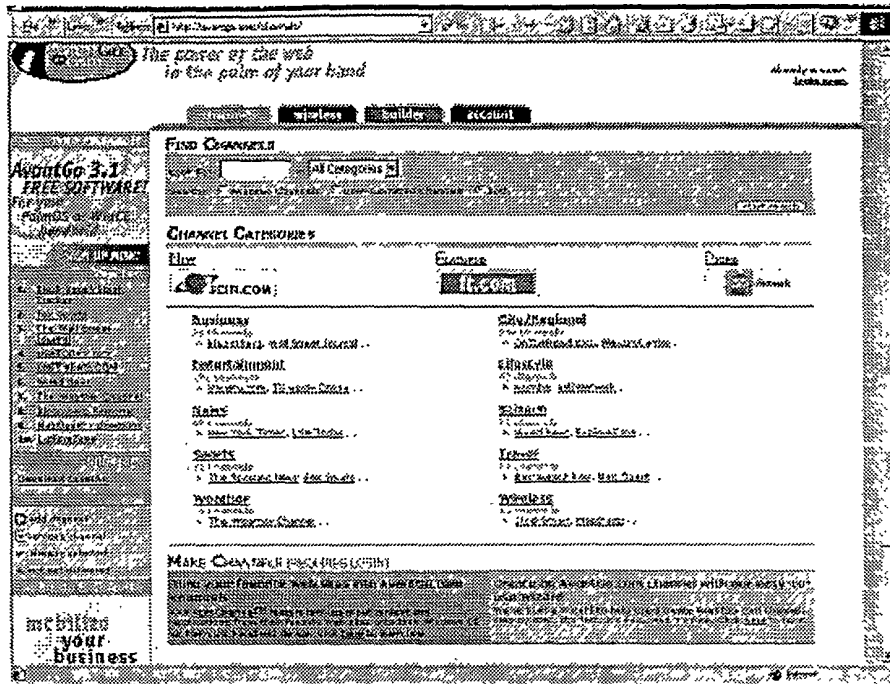
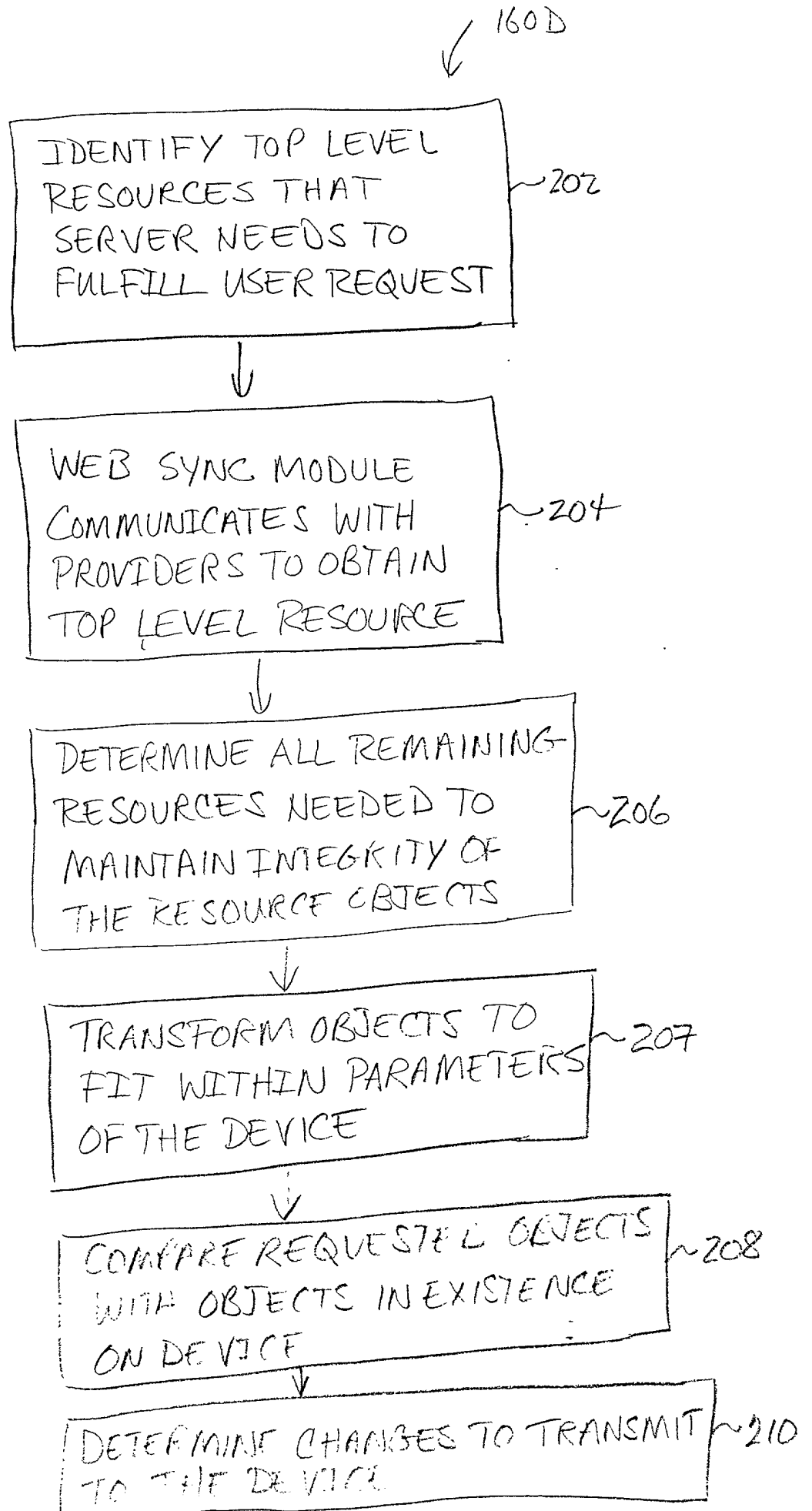


FIG. 1AB

FIG. 2



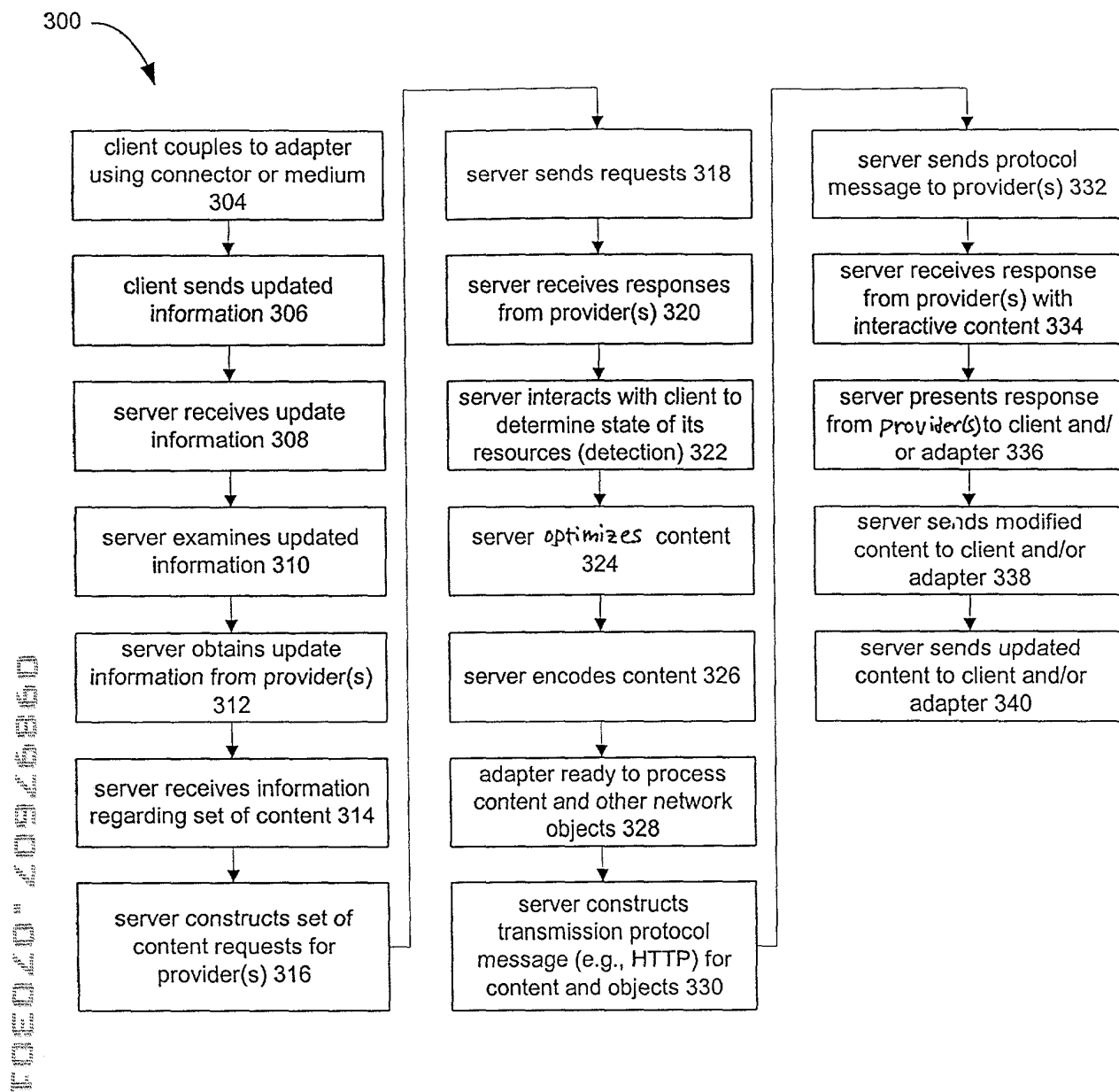


FIG. 3A

Serving XML to Device

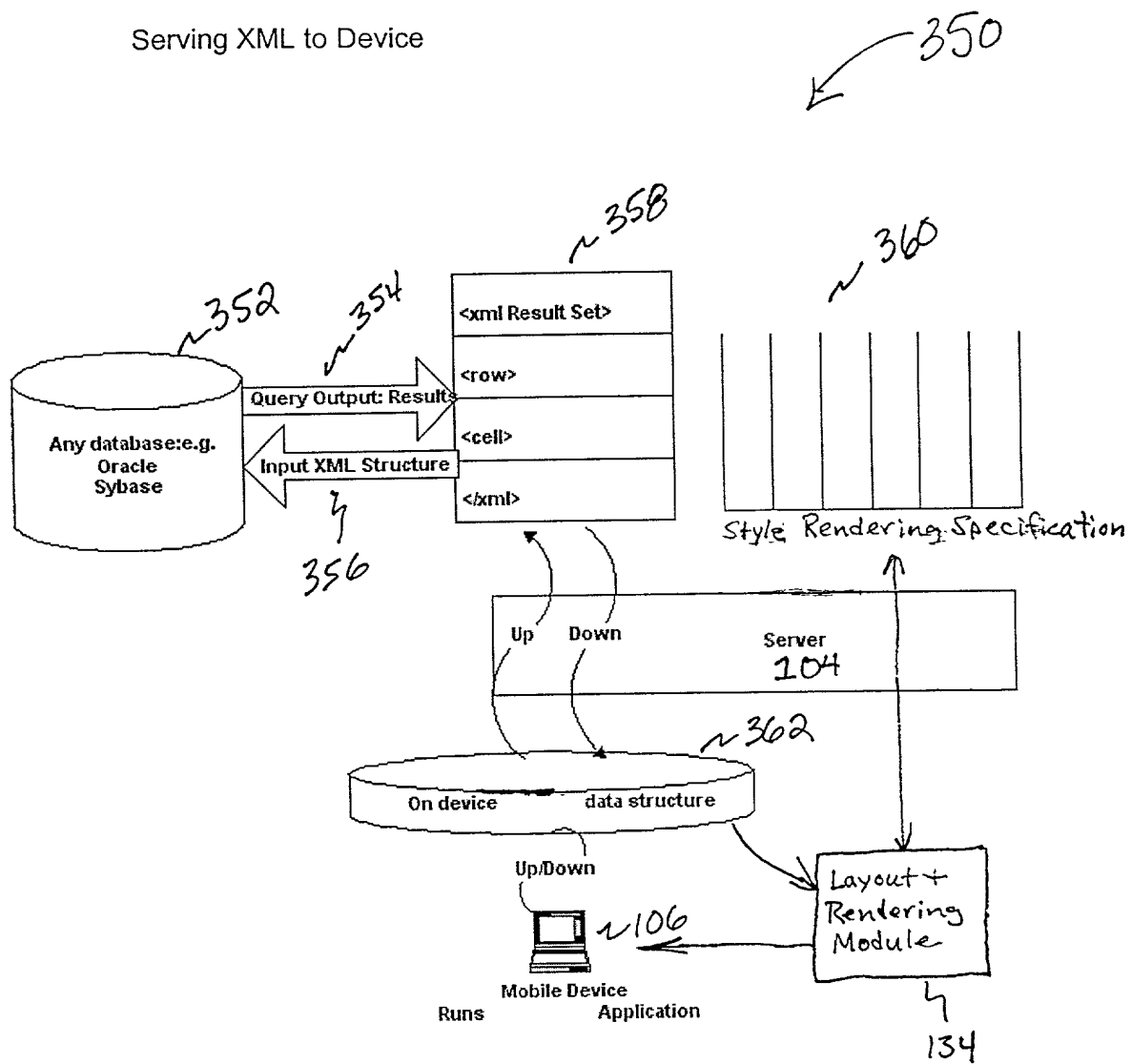


FIG. 3B

FIG. 4A

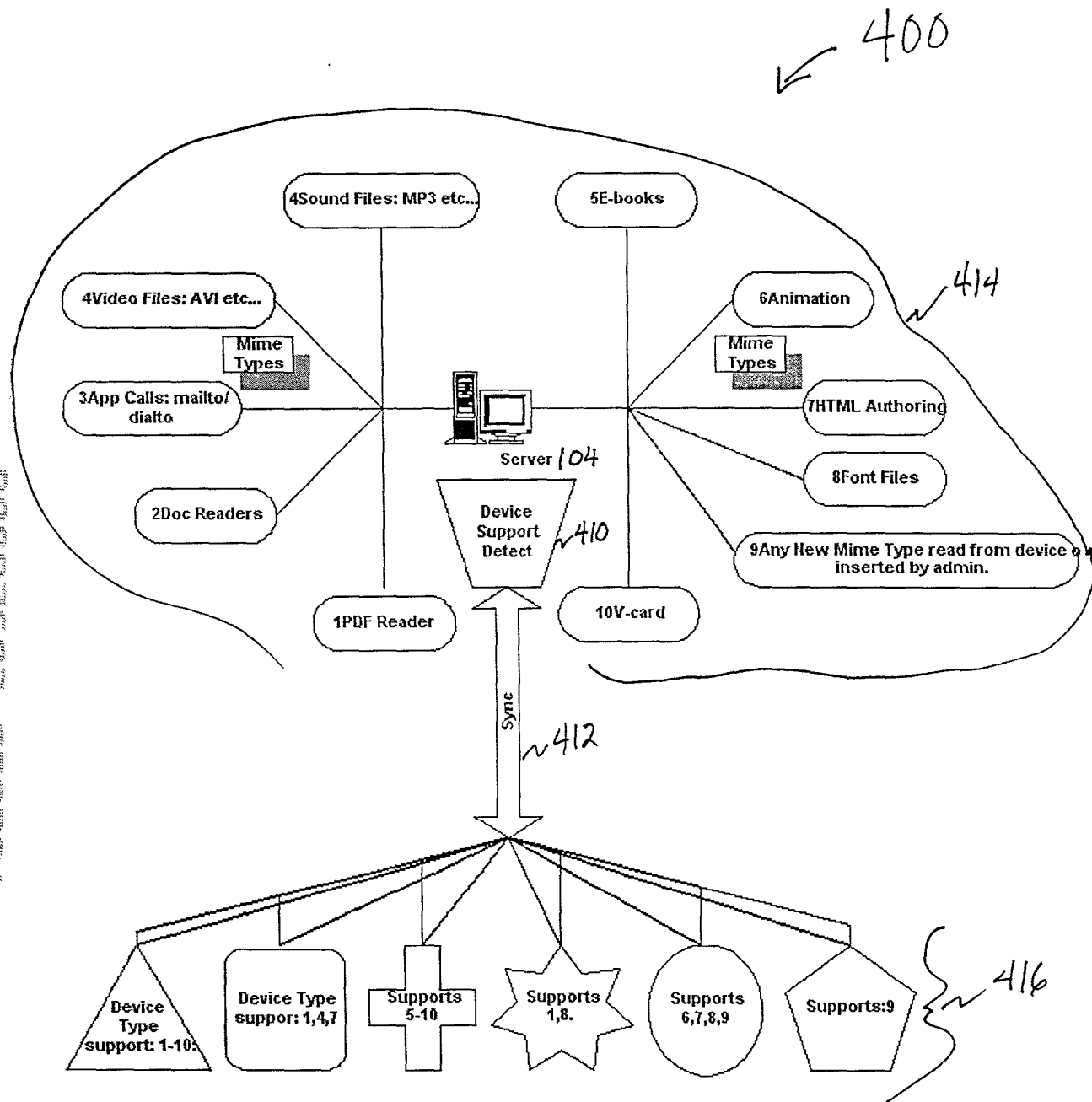


FIG. 4A

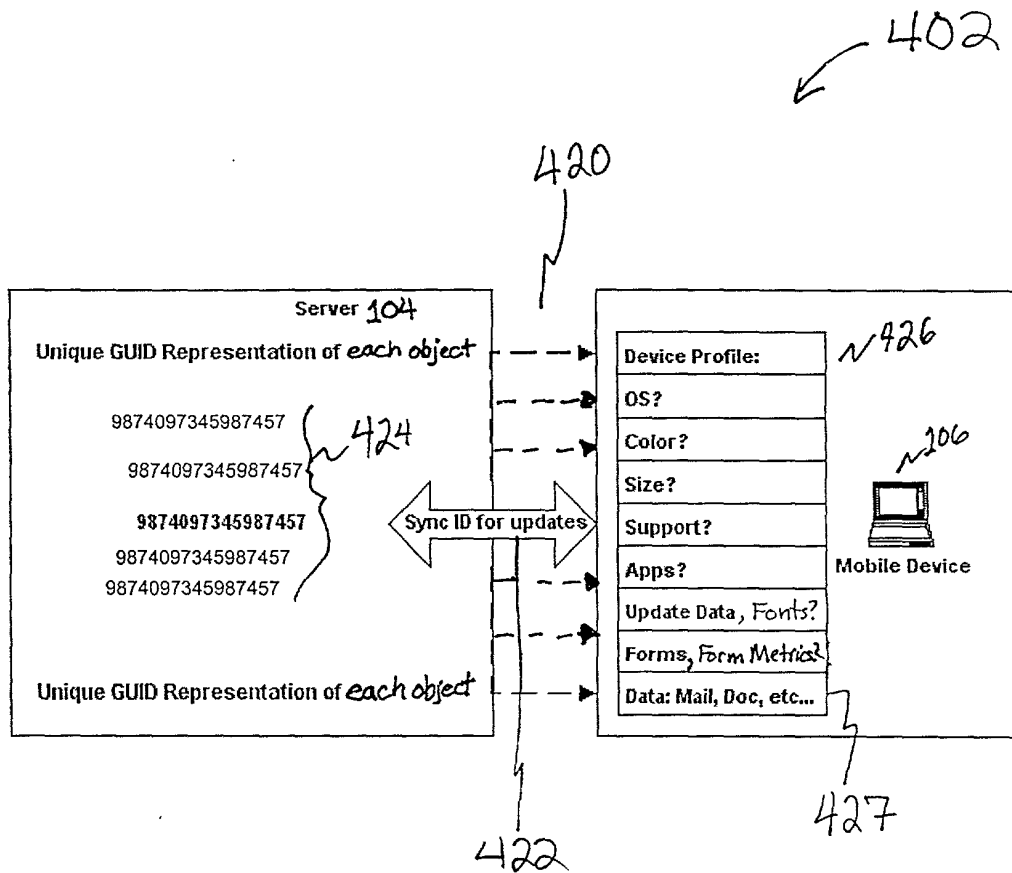
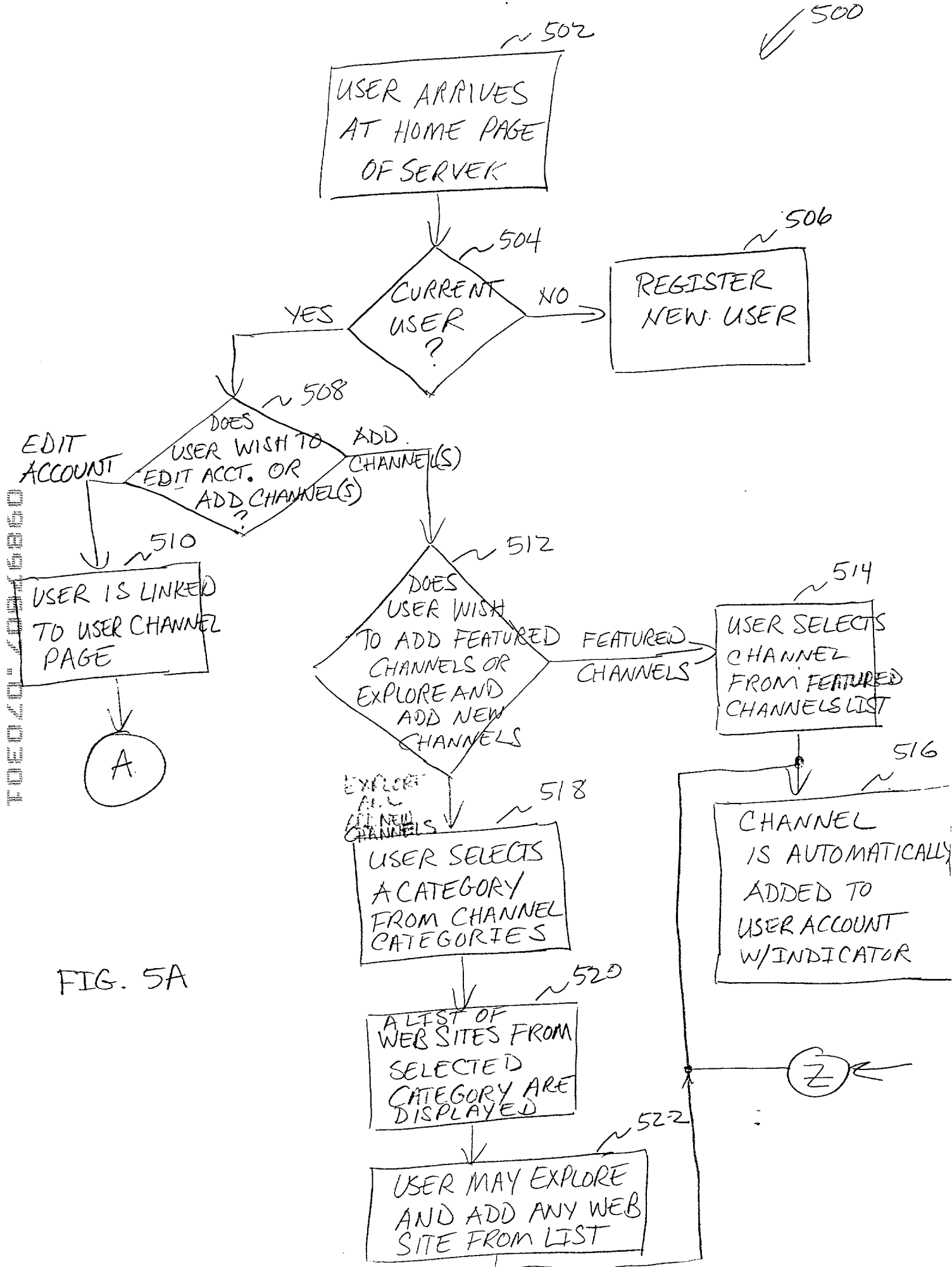


FIG. 4B



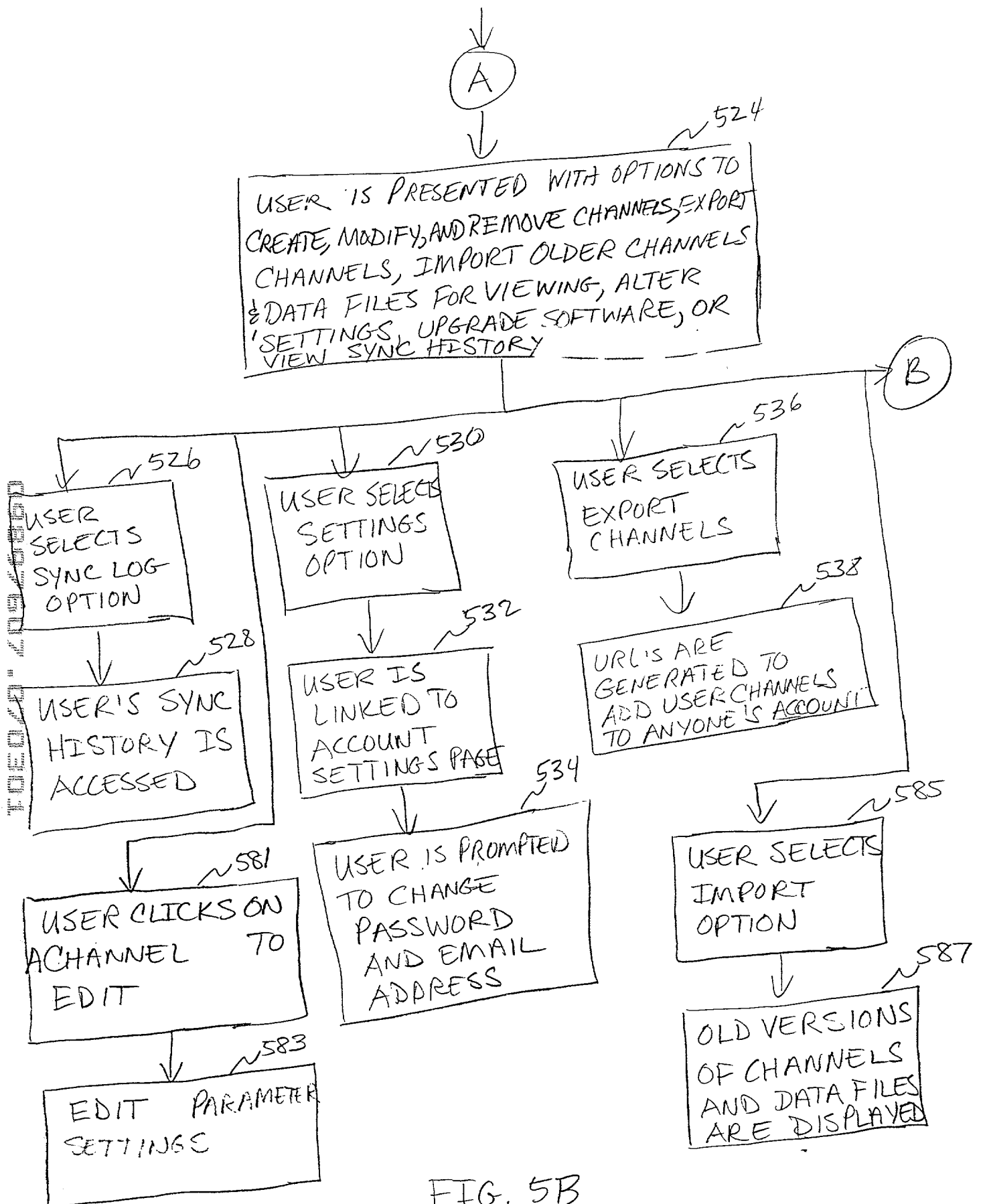


FIG. 5B

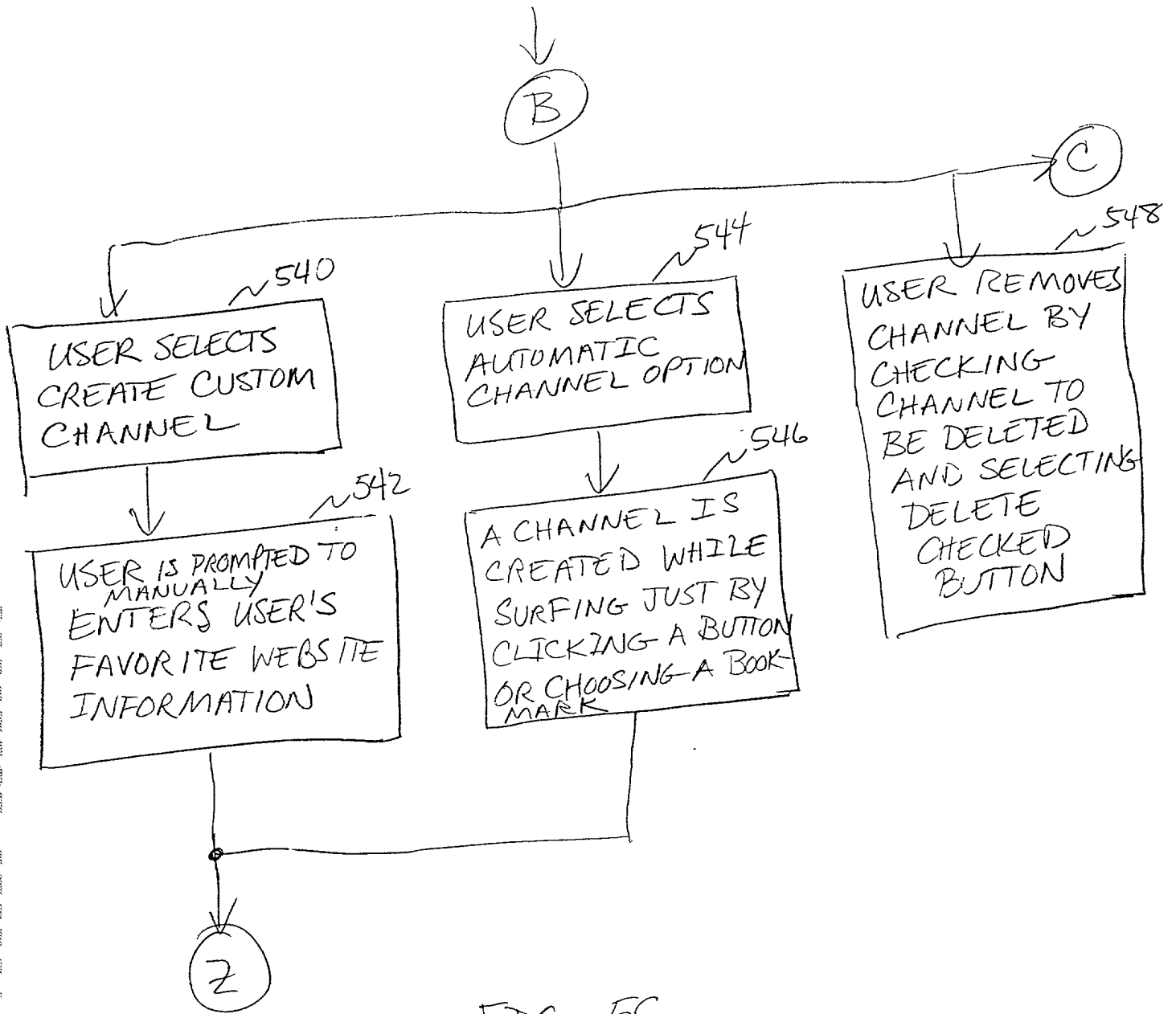
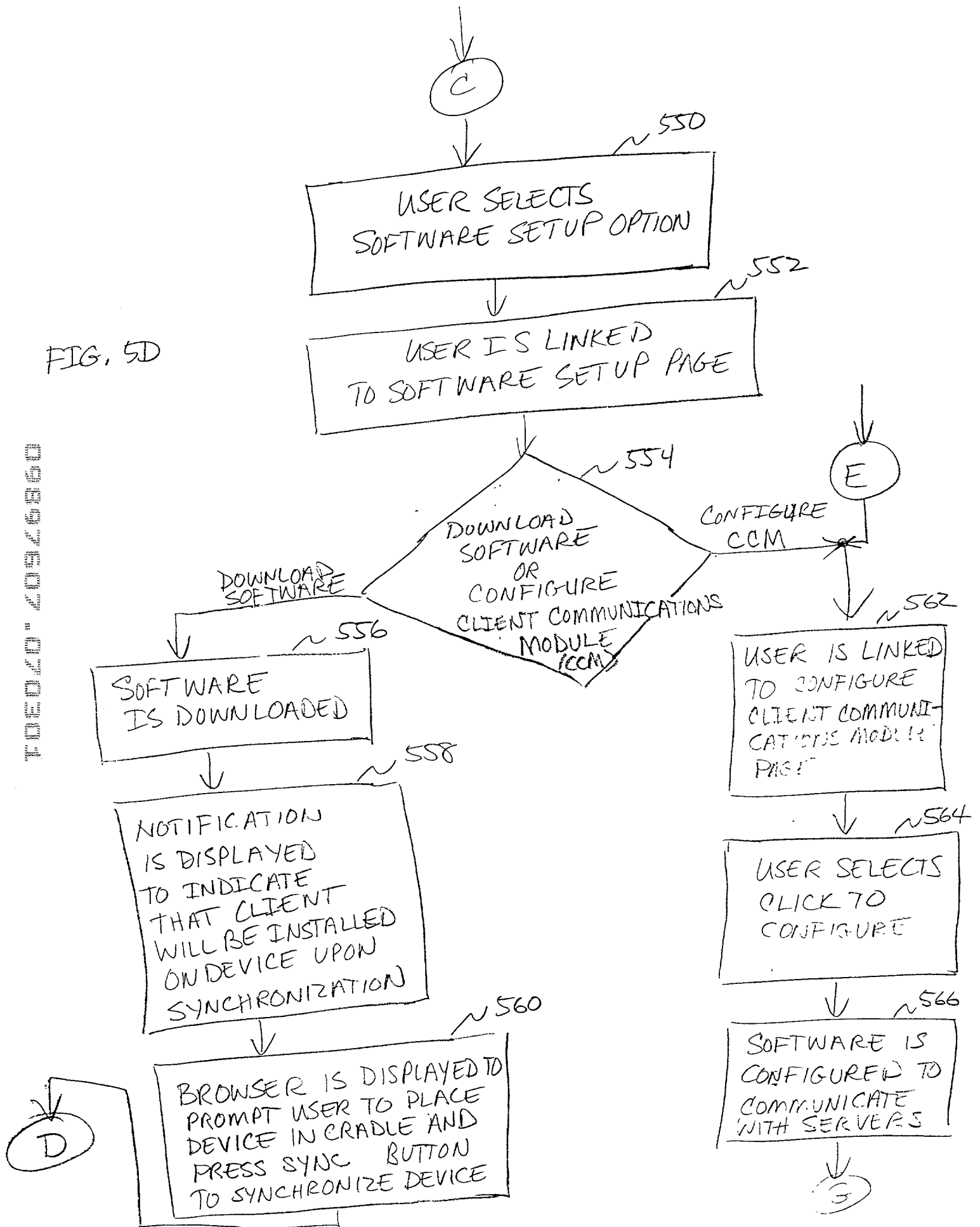


FIG. 5C

09897607.070304

FIG. 5D



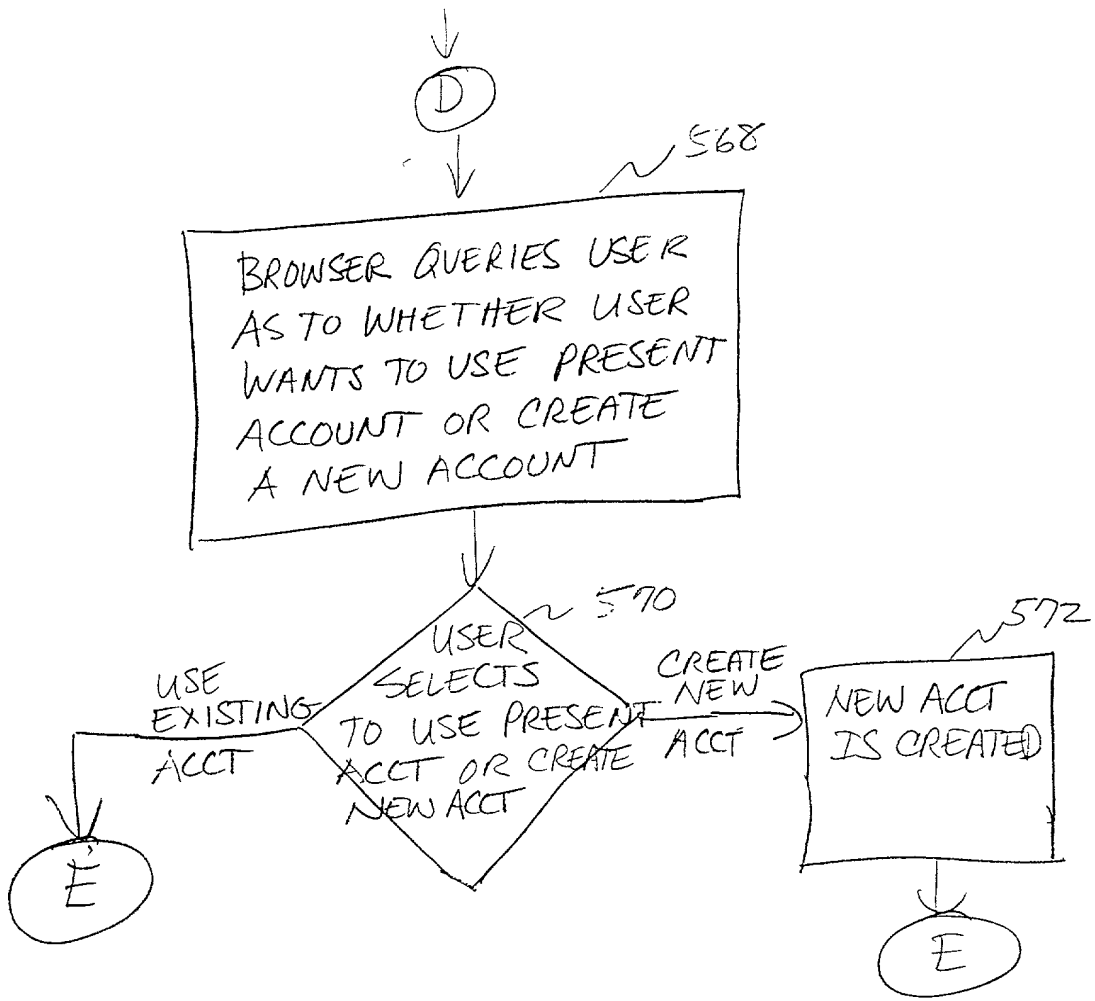


FIG. 5E

FIG. 5F.

09897607.070304
T0E0707098960

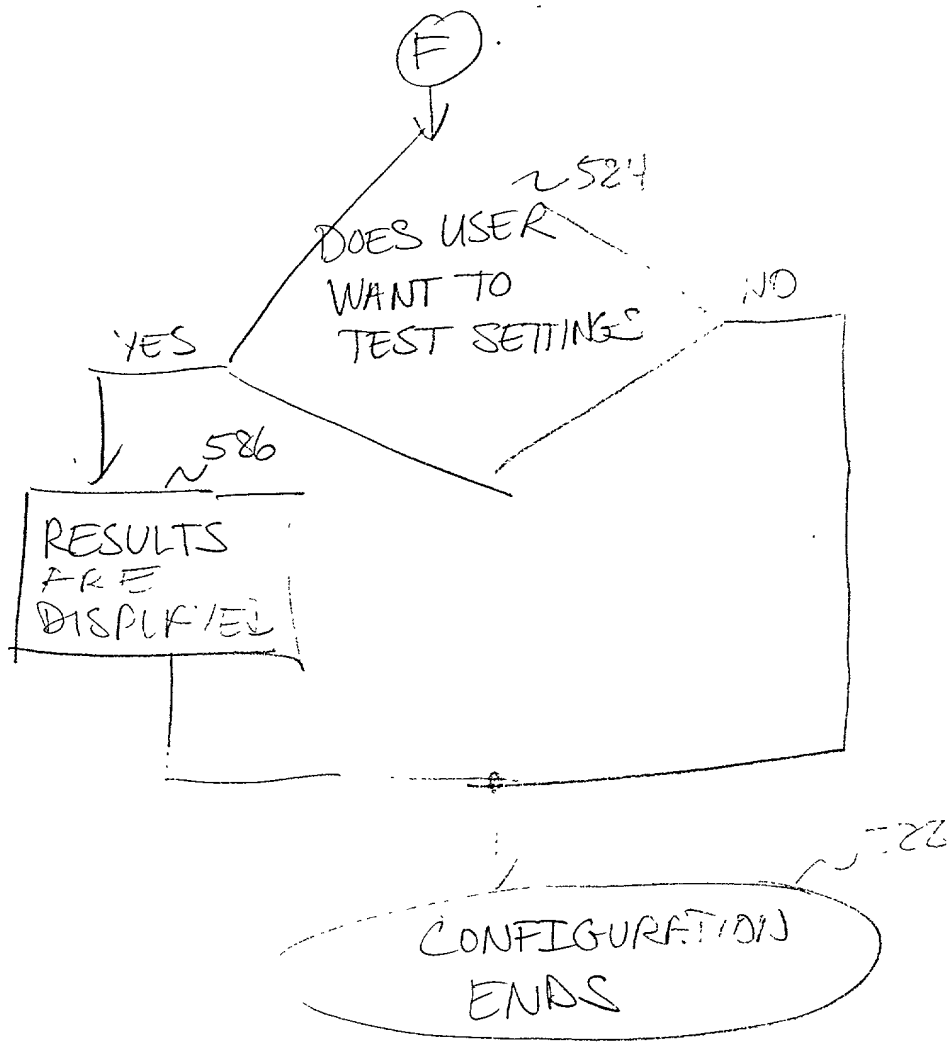


FIG 55

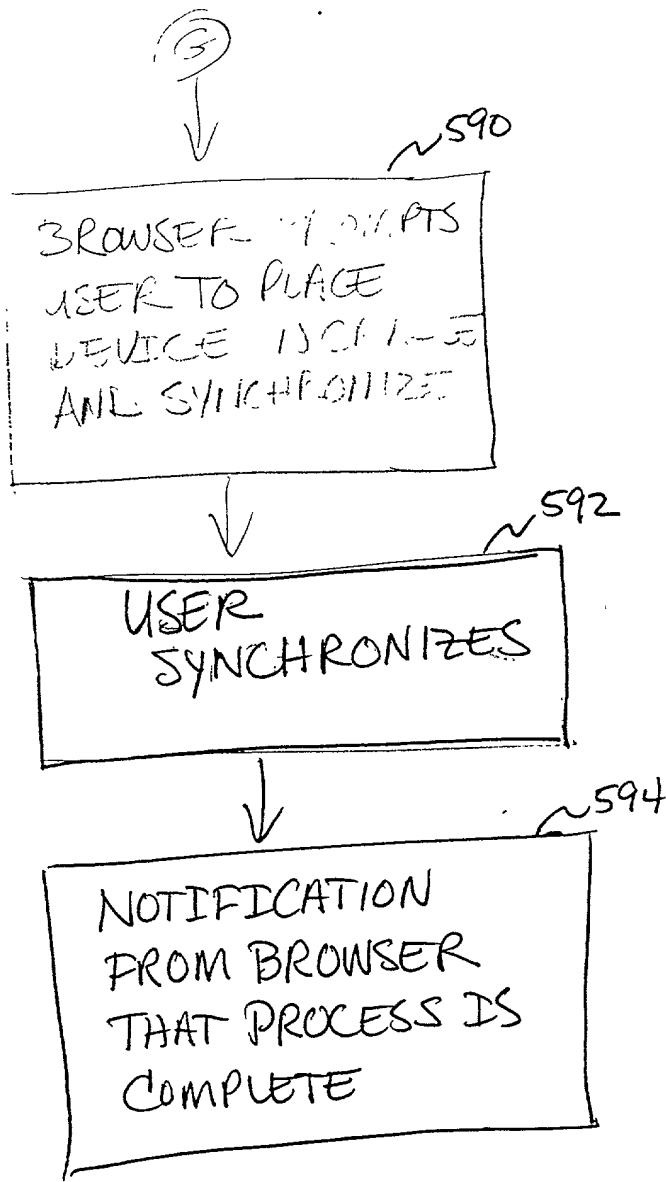
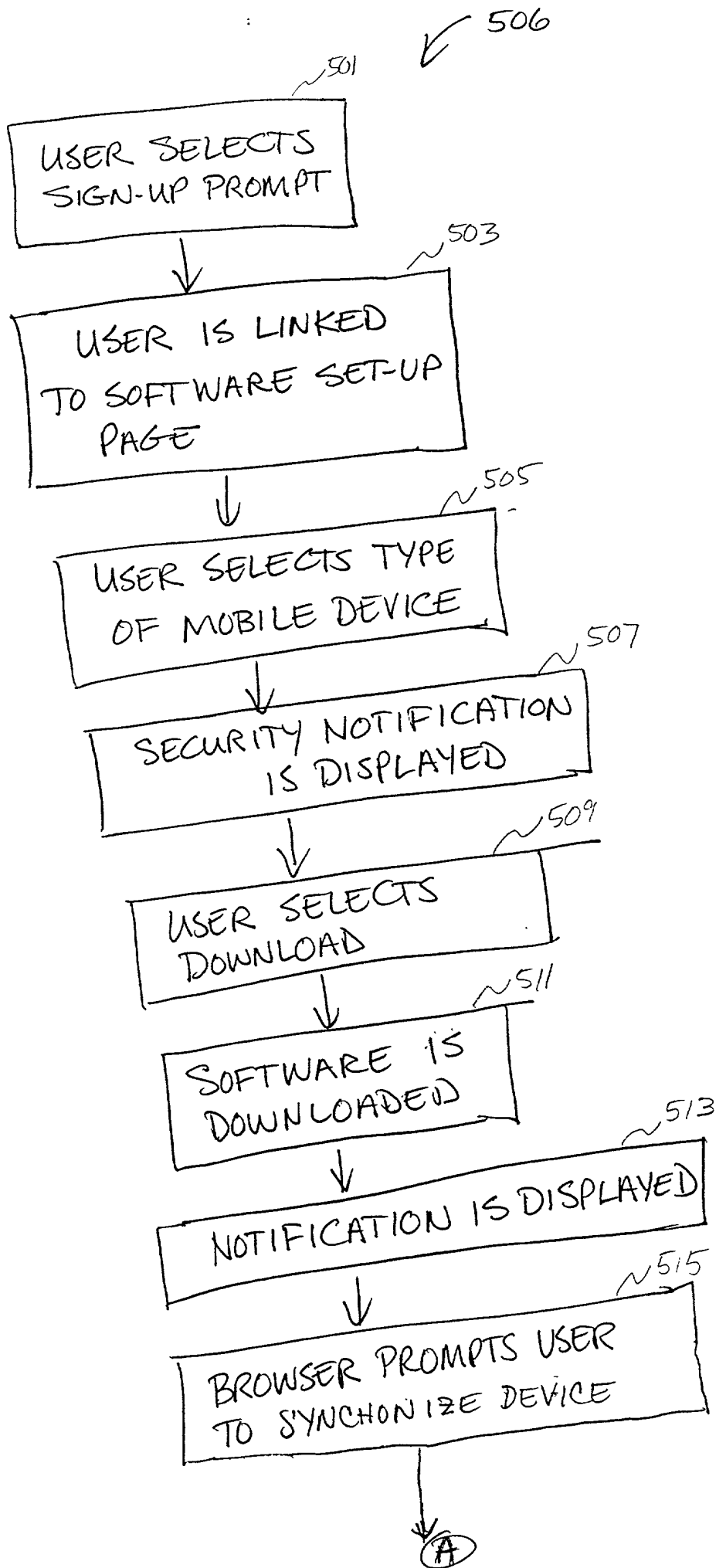


FIG. 5H

FIG. 5I



✓ S06 cont 4

09897607.030301

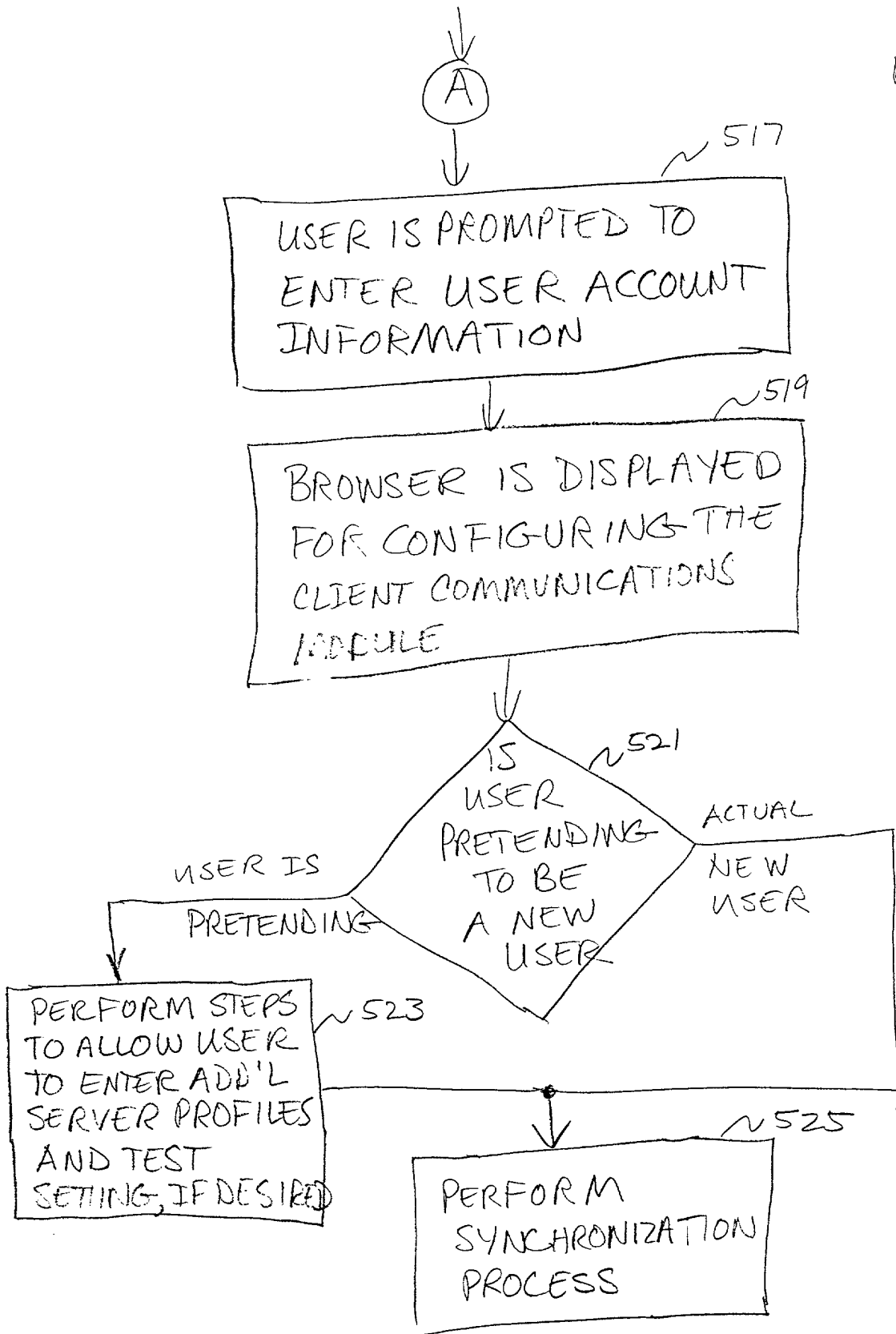


FIG. 5J

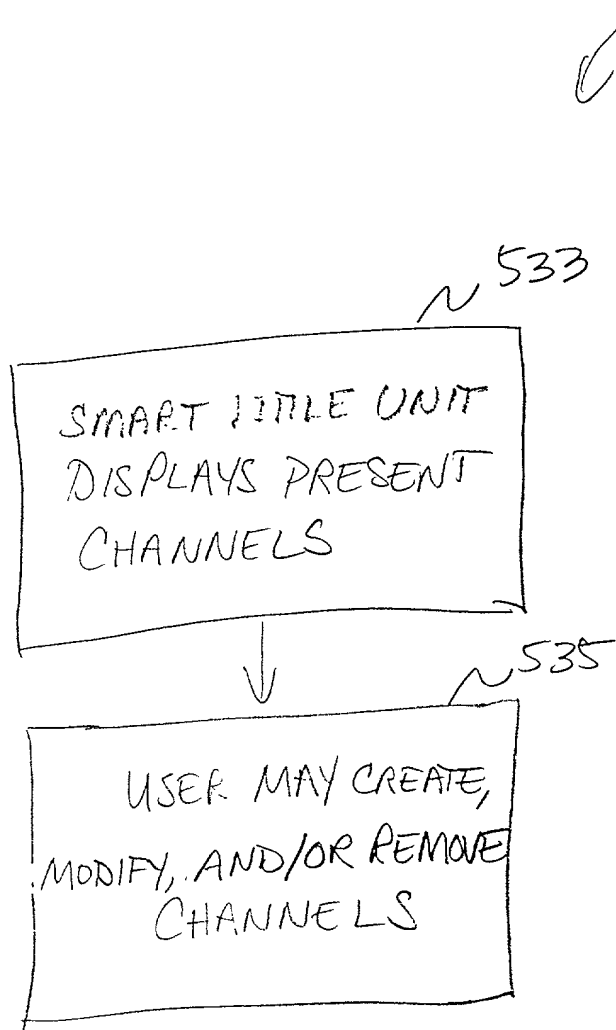
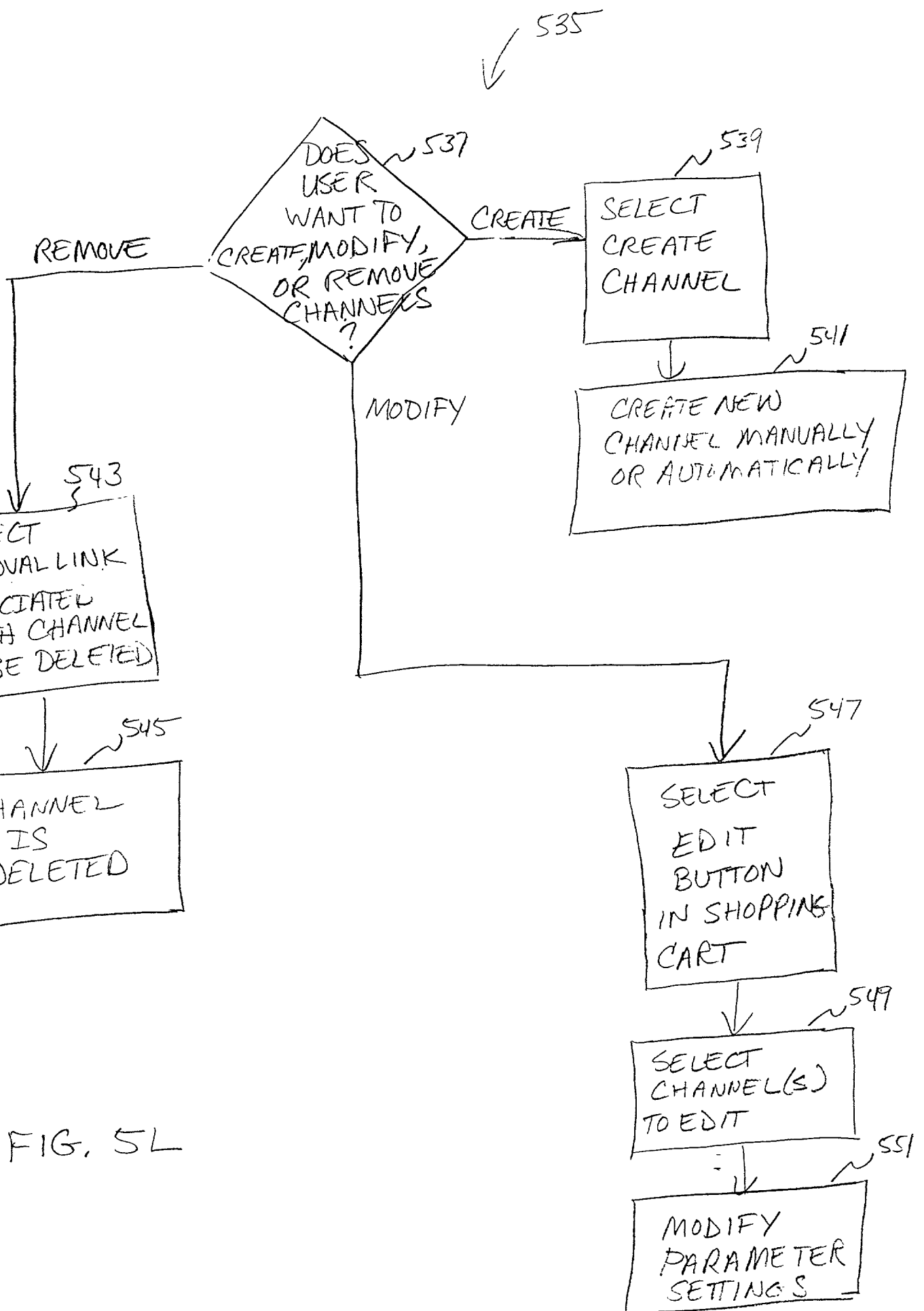


FIG. 5K

FIG. 5L



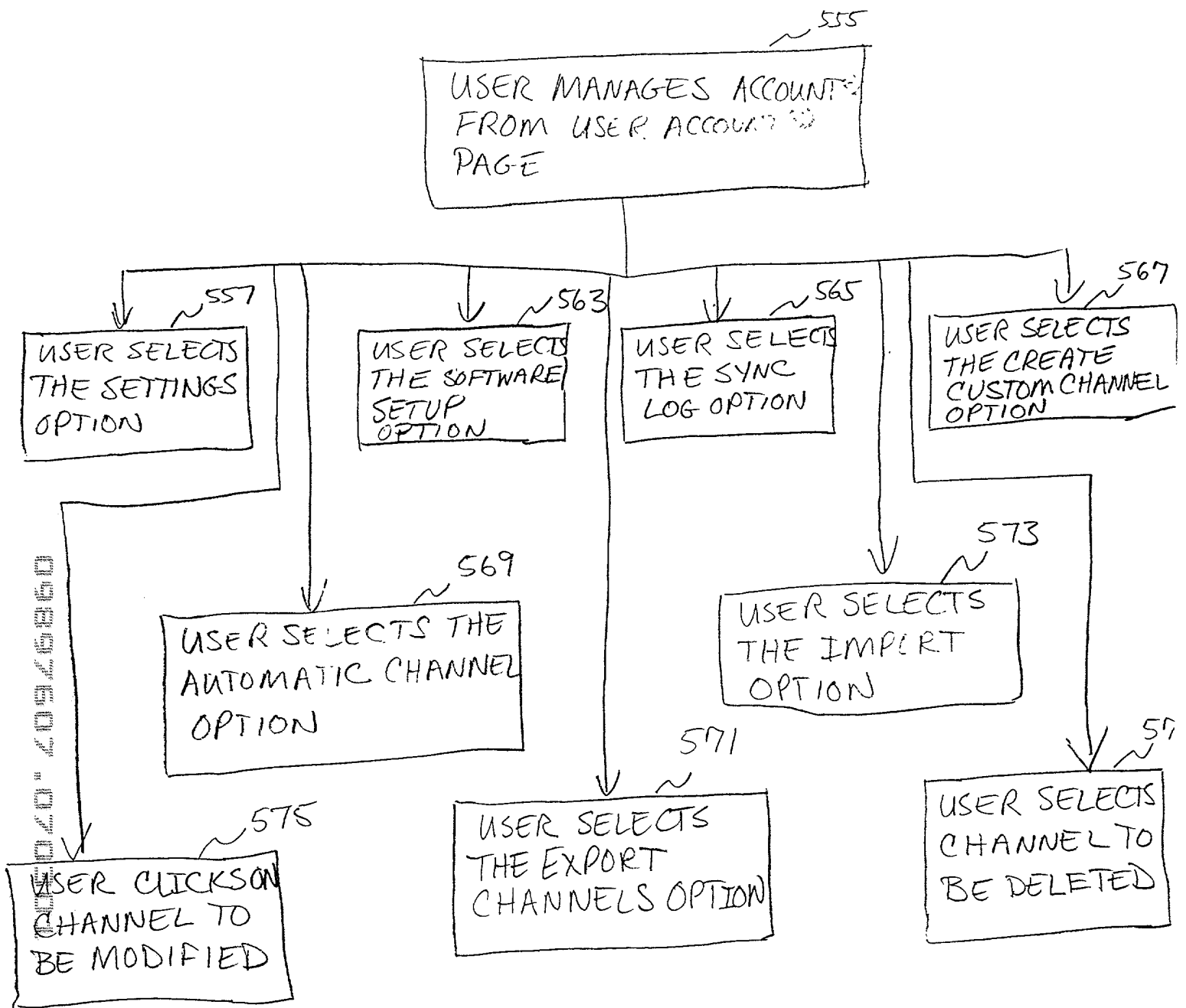




FIG. 5M

Forms Manager  

☐ 2:11p Maintenance Log success

☐ 2:12p Maintenance Log success

☐ 2:15p Service Request pending

FIG. 6

Stock Smart

Home

Monitor List

Up to 10 Tickers

msft orcl

Separate by Spaces

Update

Wednesday, MAY 05, 1999 05:53PM

Copyright 1996-1999 Stock Smart

all rights reserved

FIG. 7

File Edit Go Tools

Channel Manager

<input type="checkbox"/> My Sales Forms	1K
<input type="checkbox"/> Sales Demo	30K
<input type="checkbox"/> Sales Force Automation Forms	40K
<input type="checkbox"/> Survey	90K

Select All Clear

The Clear button will delete the selected channels from the device. These channels will come back the next time you sync.

Start 4:25p

FIG. 8

AvantGo Options OK X

Browser Online

☒ Show Images

☒ Show Detailed Find Results

☐ Always Show Open Page Window

FIG. 9

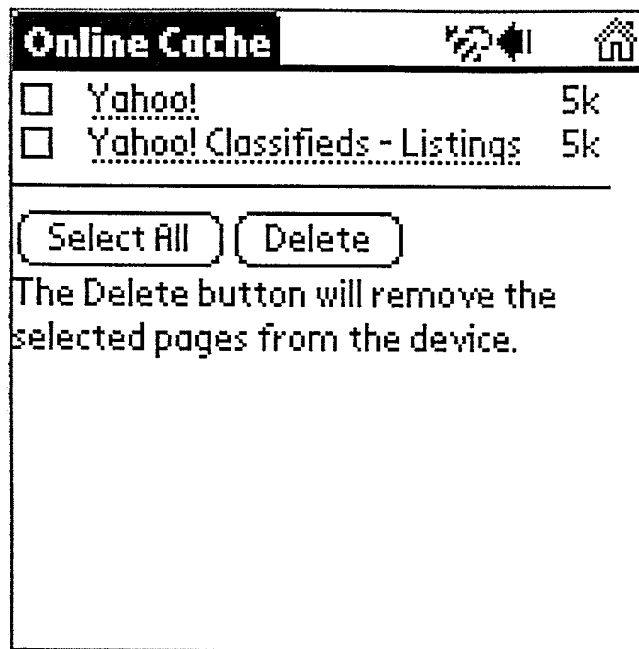


FIG. 10



FIG. 11



FIG. 12

Enter text to
search for here.

AvantGo Find

Find: movies

Choose in current
page or in all
pages here.

FIG. 13

AvantGo  **AvantGo**

PERSONAL CHANNELS — 1402

My Sales Forms

Sales Information — 1404

Sales Demo

Sales Force Automation Forms

Survey

☐ manage forms

☐ change servers

☐ remove channels

FIG. 14



AvantGo opens, showing your channels.
Tap a channel's name to display it.

Fig. 15

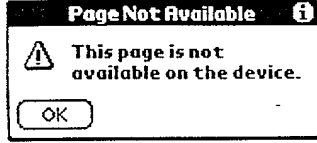


FIG. 16

0997607-070304

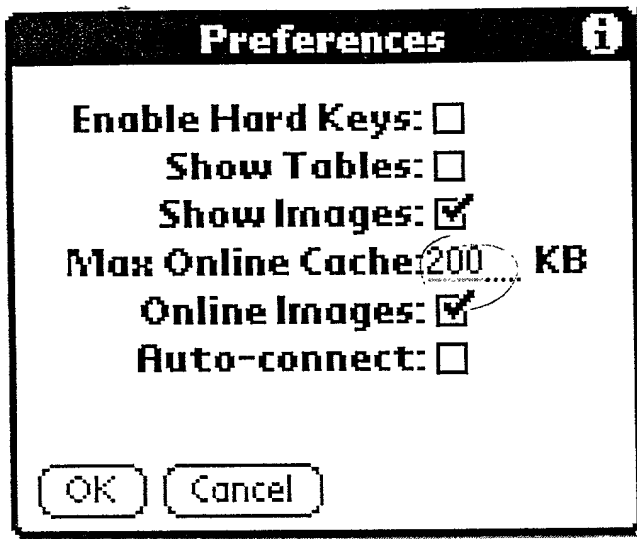
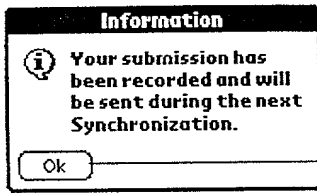


FIG. 17



Fig. 17



Click here to save the form and submit it the next time you sync.

FIG. 19

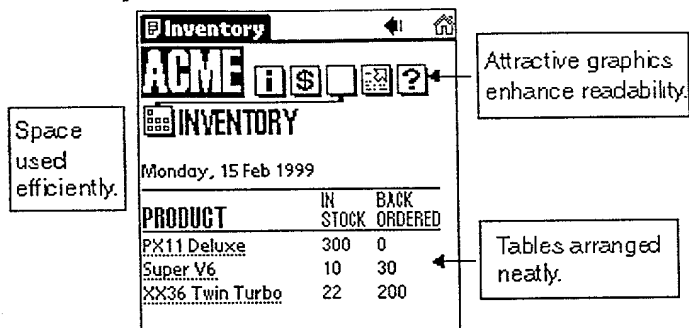


FIG. 20



Increase font

FIG. 21



Decrease font

FIG. 22

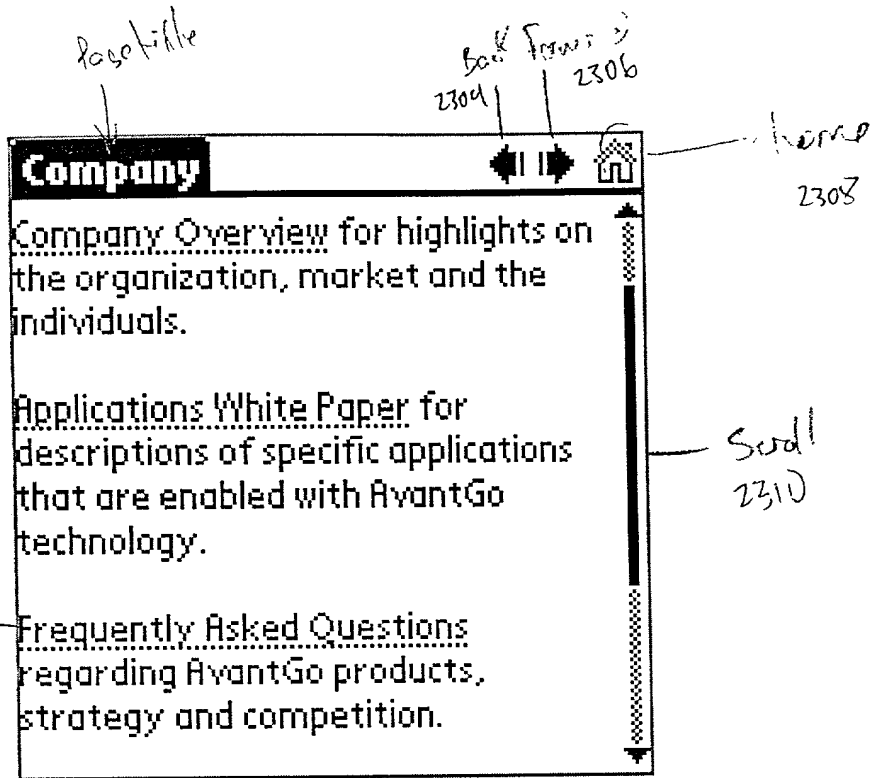


FIG. 23

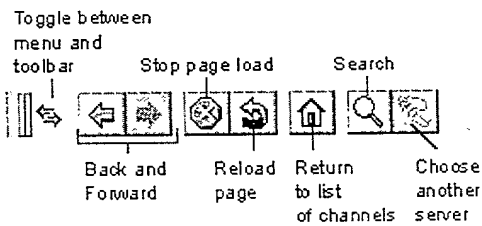


FIG. 24

FIG. 20

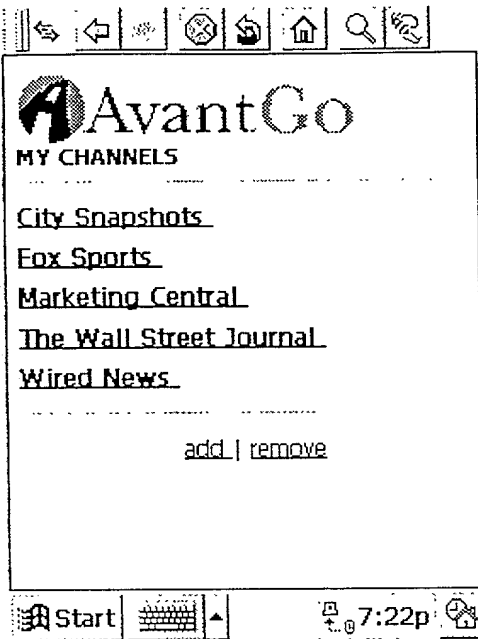


FIG. 25

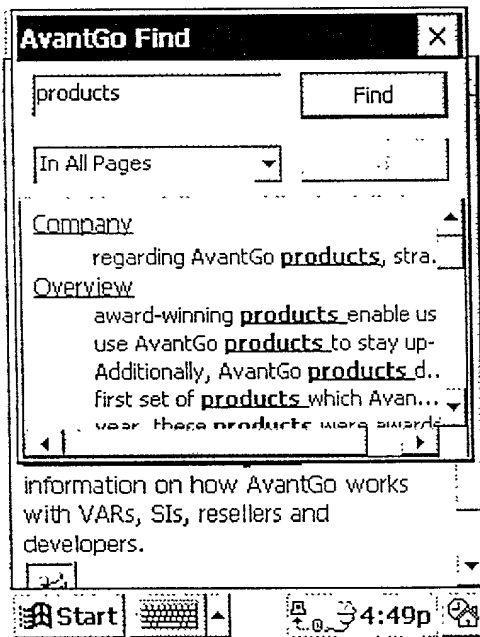


FIG. 26

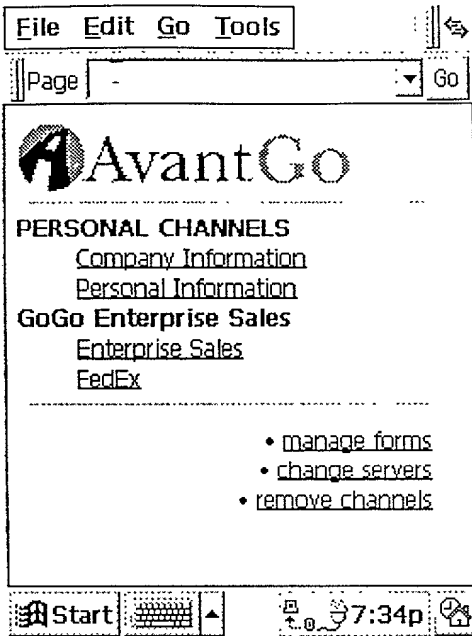


FIG. 27



AvantGo Enterprise

Username

Password

☐ Remember me

Login

[Download Client Software](#)
[View Client Guide](#)

Copyright ©1997-2000 AvantGo, Inc.
Version 3.4.152 NT



Contains encryption software from
RSA Data Security, Inc. Copyright ©
1999-2000 RSA Data Security, Inc.
All Rights Reserved.

FIG. 28

Help

Logout

TASKS

Find User

New User

List All Users

User Detail

To modify this user's user name, name, or password, edit the appropriate fields and click 'Save'. This user's personal channels and group memberships may also be edited.

User Name: Administrator

First Name:

Last Name:

Password:

Confirm Password:

Save

Delete...

Reset

Sub-menu

Special Links

Legend

FIG. 29

[illegible]

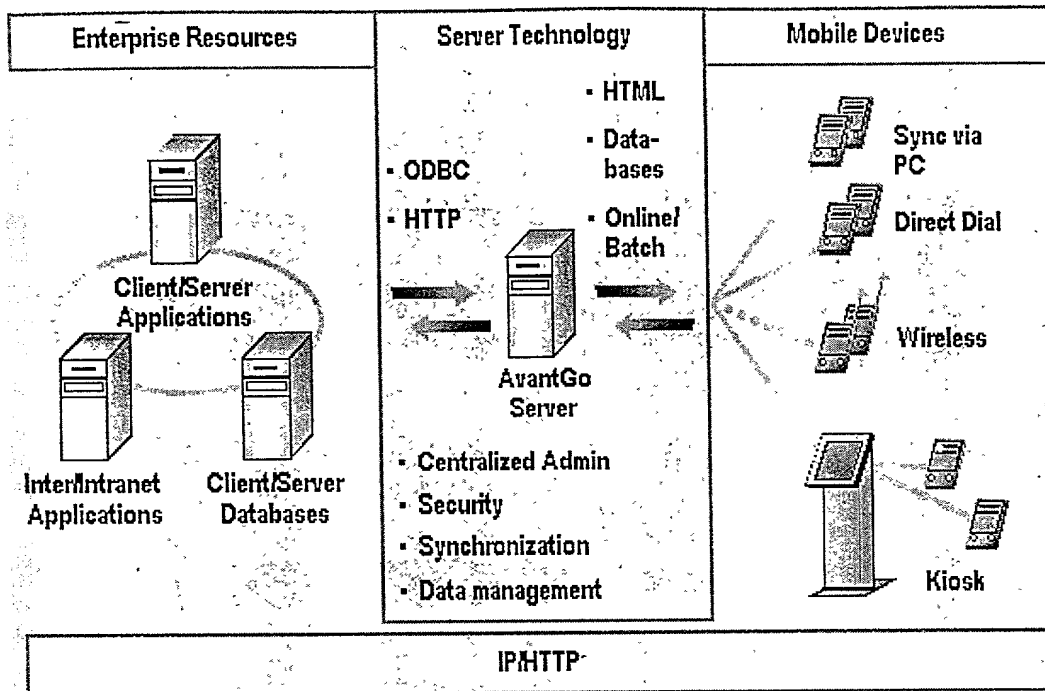


FIG. 30

TE020709/5860

Enter: Tutorial Click View to view/test the address of your channel.

Enter: http://
syncdemo.avantgo.com/
sfa_3_1/

New Channel for User MobileUser

Title:	Untitled	
Location:	http://	View
Channel Size Limit:	100	
Link Depth:	0	
Include Images:	<input type="checkbox"/>	
Follow Off-Site Links:	<input type="checkbox"/>	
Allow Binary Distribution:	<input type="checkbox"/>	
Hide from Users:	<input type="checkbox"/>	
Send URLs:	<input type="checkbox"/>	
Refresh:	<input type="radio"/> only once <input checked="" type="radio"/> every sync <input type="radio"/> hourly every <input type="text" value="0"/> hour(s) <input type="checkbox"/> only <input type="radio"/> daily	
	<input type="text" value="12"/> : <input type="text" value="00"/> <input checked="" type="radio"/> AM <input type="radio"/> PM	
	on days:	
	<input checked="" type="checkbox"/> Monday <input checked="" type="checkbox"/> Tuesday <input checked="" type="checkbox"/> Wedn	
	<input checked="" type="checkbox"/> Friday <input checked="" type="checkbox"/> Saturday <input checked="" type="checkbox"/> Sunda	

Enter: 100 Enter: 3

Leave these fields unchecked.

Click the only once option.

Click the Create button.

Create Reset Cancel

FIG. 31

Refresh:

- ☒ on every sync
- ☐ every hour(s)
- ☐ only once
- ☐ daily at : on the following days:
 - ☒ Monday ☒ Tuesday ☒ Wednesday ☒ Thursday
 - ☒ Friday ☒ Saturday ☒ Sunday

When finished, click the "Save Channel" button:

FIG. 32

Update User Membership for Group Travel Itinerary

Manage this group's user memberships by selecting/deselecting the user check boxes and clicking update. To view information about a particular user, click the hyperlink name of the user.

User Name:	<input type="text"/>
First Name:	<input type="text"/>
Last Name:	<input type="text"/>
<input type="button" value="Find User"/>	

Search Results

User Name	Name
<input type="checkbox"/> Joja	John Jack
<input checked="" type="checkbox"/> Natalie	Natalie Doe
<input type="checkbox"/> new	new test
<input type="button" value="Update"/> <input type="button" value="Reset"/> <input type="button" value="Return to Group"/>	

Edit server profile

Server address

Hostname

Port

Your account

Username

Connection options

☒ Connect to this server.

☐ Refresh all content.

☒ Connect securely.

FIG. 34

FIG. 33

MODE: Administrator

AvantGoEnterprise

Ver. 3.2 Build 72

STATUS

USERS

GROUPS

SETTINGS

Help

Logout

TASKS

Find User

New User

List All Users

Modify Channels of Natalie

For more information or to modify or delete a specific channel, click on the title. To create a new personal channel, click the New Personal Channel link on the left.

Title	Total Size	Last Sync
Personal Channels		
Enterprise Intranet		
Federal Express	0	Never Synced
GoGo Enterprise Sales		
Enterprise Intranet for Sales	7	Wed Oct 06, 1999 12:32:55
FedEx	93	Wed Oct 06, 1999 12:32:55
Sales Force Automation Forms	18	Wed Oct 06, 1999 12:32:55
Travel Itinerary		
Total: 118KB		
<div>Create New Personal Channel</div> <div>Return to User</div>		

Recent Sync History

The three most recent synchronizations are logged below. More information can be found in the [Complete Sync History](#).

[Wed Oct 06, 1999 12:32:44] (12 seconds)

HTTP/1.1 404 File not found(404) - http://localhost/device/brand/avantgo/images/device/CE_header.gif

[Wed Oct 06, 1999 12:32:34] (0 seconds)

Completely out of sync, resequencing...

[Wed Oct 06, 1999 12:31:35] (13 seconds)

HTTP/1.1 404 File not found(404) - http://localhost/device/brand/avantgo/images/device/CE_header.gif

Clear Channel Cache

During synchronization, the server updates existing channels and pages with modifications only. Clearing the channel cache will force all the channels and pages to be transferred to the device during the next synchronization.

Clear Cookies

Cookies containing profile information about you are placed in your user profile by the sites that you visit. Clearing the cookies database may remove personalized information stored on your device by the web servers that you visit. Clearing cookies will disable the "remember me" feature from the login prompt.

Clear Authentication Info

Some web servers require you to supply a user name and password to access the site. The server caches this authentication information and supplies it to the web server during synchronization. Clearing the authentication database will usually require you to reenter your user name and password the next time you visit a site that requires authentication.

FIG. 35

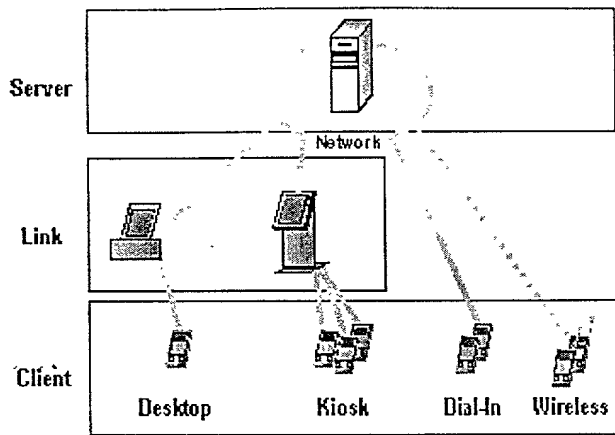


FIG. 3b

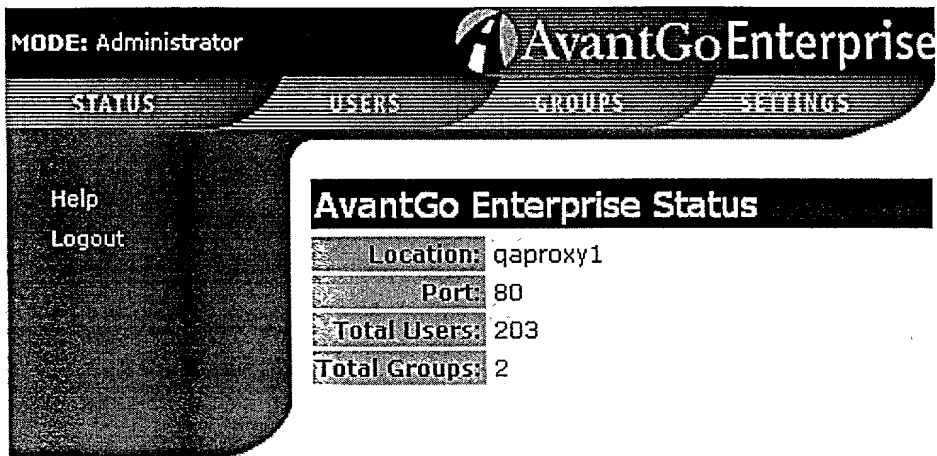


FIG. 37

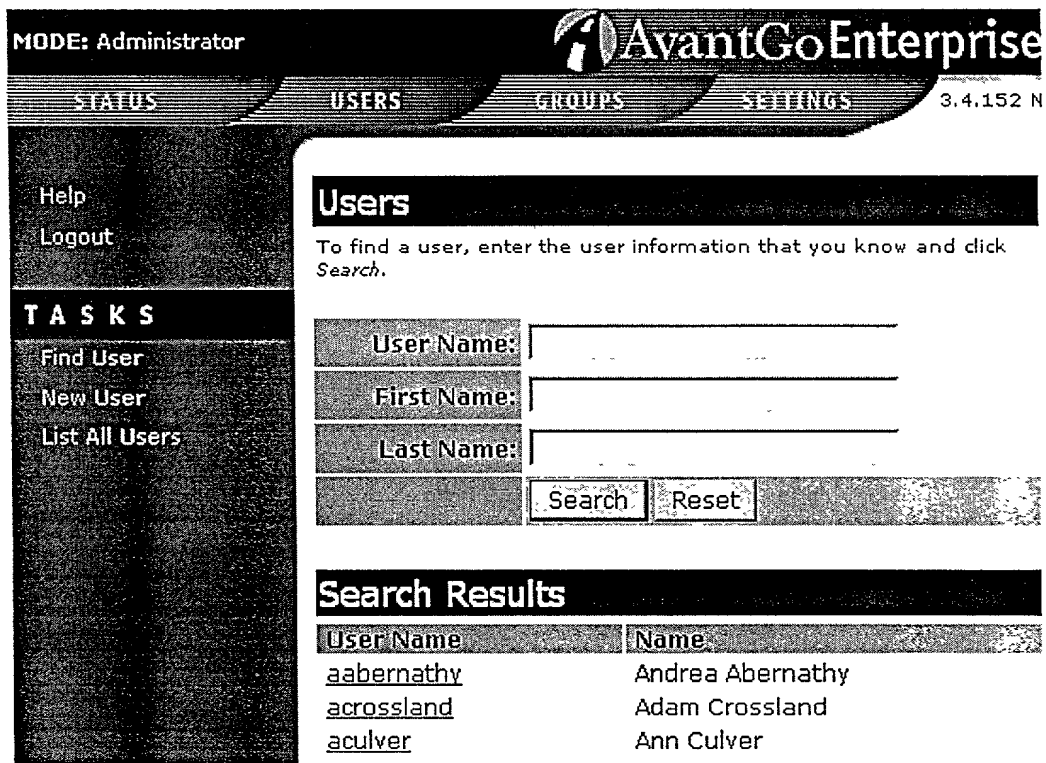


FIG. 38

TOP SECRET

MODE: Administrator

AvantGo Enterprise

3.4.152 NT

STATUS USERS GROUPS SETTINGS

Help
Logout

T A S K S

Find User
New User
List All Users

User Detail

To modify this user's user name, name, or password, edit the appropriate fields and click 'Save'. This user's personal channels and group memberships may also be edited.

Adam Crossland

User Name:	Jacrossland
First Name:	Adam
Last Name:	Crossland
Password:	
Confirm Password:	
<input type="button" value="Save"/> <input type="button" value="Delete..."/> <input type="button" value="Reset"/>	

FIG. 39

09897607.070304

STATUS USERS **GROUPS** SETTINGS 3.4.152 NT

Help
Logout

TASKS
List All Groups
New Group

Modify Group test group 1

Modify this group's name and description by editing the fields and clicking Save. To manage this group's users or channels, click 'Add/Remove Users'. To create a channel for this group, click 'New Group Channel'. To edit this group's channel, click on its name.

Name:

Description:

Group Members

User Name	Name
drice	David Rice
dylan	Dylan McDanniel
rafael	Rafael Weinstein
robert	Robert Otani

Group Channels

FIG. 40

MODE: Administrator

STATUS USERS **GROUPS** SETTINGS 3.4.152 NT

AvantGoEnterprise

Help
Logout

TASKS
List All Groups
New Group

Groups

Modify or view a group by clicking on its name.

Group Name	Description
asdf	
test group 1	test

FIG. 41

MODE: Administrator

AvantGoEnterprise

STATUS

USERS

GROUPS

SETTINGS

3.4.152 N

Help
Logout

T A S K S

Change Admin
Password
PalmOS Download
WinCE Download

Admin Settings

Old Password:

New Password:

Confirm New Password:

Save

Reset

FIG. 42

FIG. 42


Internet Explorer - Microsoft Internet Explorer
Address: nnel_properties.html?cha_id=2928246 Go Back Forward Stop Home Search Favorites Links File

My Channels
Settings
Software Setup
Sync Log

CHANNEL PROPERTIES

BACK TO CHANNELS

CHANNEL TITLE

 Fox Sports

CHANNEL SIZE

Maximum Channel Size: 100 k
Link Depth: 2
Include Images: ☒ Yes ☐ No
Follow Off-Site Links: ☒ Yes ☐ No

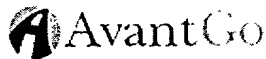
CHANNEL REFRESH

REFRESH:
☒ on every sync
☐ every 0 hour(s)
☐ only once
☐ daily at 12:00 AM on the following days:
☒ Monday ☒ Tuesday ☒ Wednesday ☒ Thursday
☒ Friday ☒ Saturday ☒ Sunday

SAVE CHANNEL CHANGES

Internet

FIG. 43



Welcome, dkoehn68

[Log out](#)

MY ACCOUNT

[My Channels](#)

[Settings](#)

[Software Setup](#)

[Sync Log](#)

AUTOCHANNEL™

[BACK TO CHANNELS](#)

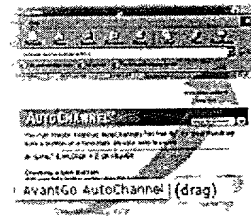
You can create AvantGo AutoChannels "on the fly" for your handheld from a button or a bookmark on your web browser.

INTERNET EXPLORER 4.0 OR HIGHER

Creating a Link Button

With your links toolbar visible, drag the AvantGo AutoChannel™ link below to the toolbar. Clicking on the button while browsing a website will let you add that website to your handheld device.

Drag this link: [AvantGo AutoChannel](#)



Creating a Bookmark

Right-click on AvantGo AutoChannel™ link below and select "Add to Favorites...". Choosing this in your favorites will let you add the website you are browsing as an AvantGo channel on your handheld.

Right-click this link: [AvantGo AutoChannel](#)

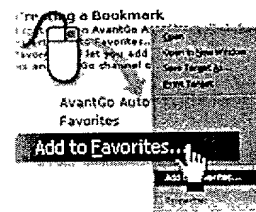


FIG. 44

09897607.070304

2007-09-09 10:00:00

AvantGo - Microsoft Internet Explorer

Address: https://avantgo.com/mydevice/creat

Go

Links

File

MY ACCOUNT

My Channels

Settings

Software Setup

Sync Log

AUTOCHANNEL (TM)

Take your favorite Websites with you

You can create AvantGo AutoChannels on the fly for your handheld from a button or a bookmark on your web browser

CREATE CHANNEL

BACK TO CHANNELS

CHANNEL TITLE

Title: Untitled

Location (URL): http:// View

CHANNEL SIZE

Maximum Channel Size: 100 k

Link Depth: 0

Include Images: ☐ Yes ☒ No

Follow Off-Site Links: ☐ Yes ☒ No

CHANNEL REFRESH

REFRESH:

☒ on every sync

☐ every 2 hour(s)

☐ only once

☐ daily at 12:00 AM on the following days:

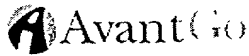
☒ Monday ☒ Tuesday ☒ Wednesday ☒ Thursday

☒ Friday ☒ Saturday ☒ Sunday

SAVE CHANNEL

Internet

FIG. 45



SEARCH CHANNELS

Look For:

GO

CHANNEL CATEGORIES

new channels

Business [65]

City/Regional [112]

Entertainment [111]

Lifestyle [57]

News [54]

SciTech [11]

Sports [113]

Travel [41]

Weather [29]

Wireless [21]

FEATURED CHANNELS

FOX SPORTS

UP-TO-THE-MINUTE SCORES, STATS, STORIES AND COMMENTARY.

salon.com

A DISTINCTIVE VOICE ON NEWS, POLITICS AND OPINION.

COOL CHANNELS [AVANTGO STAFF FAVORITES]

Autobytel

Buy your next car or keep up to date with your current car's maintenance - all from your handheld.

Hollywood.com

Have movie listings for your zip code right at your fingertips.

Restaurant Row

Find a great restaurant in your area and even make reservations wirelessly.

MyDocsOnline

Sync your desktop documents to your handheld or wirelessly email them to friends or colleagues.

Welcome, dkoeHN68

[Log out](#)

MY ACCOUNT [EDIT](#) [➔](#)

[Fox Sports](#)

[Hoover's IPO Update](#)

[The Wall Street Journal](#)

[The Weather Channel](#)

[Upside Today](#)

[Wired News](#)

[▲ Yahoo!](#)

[CREATE CHANNEL](#)

FILE 46

098976070926860

FIG. 47

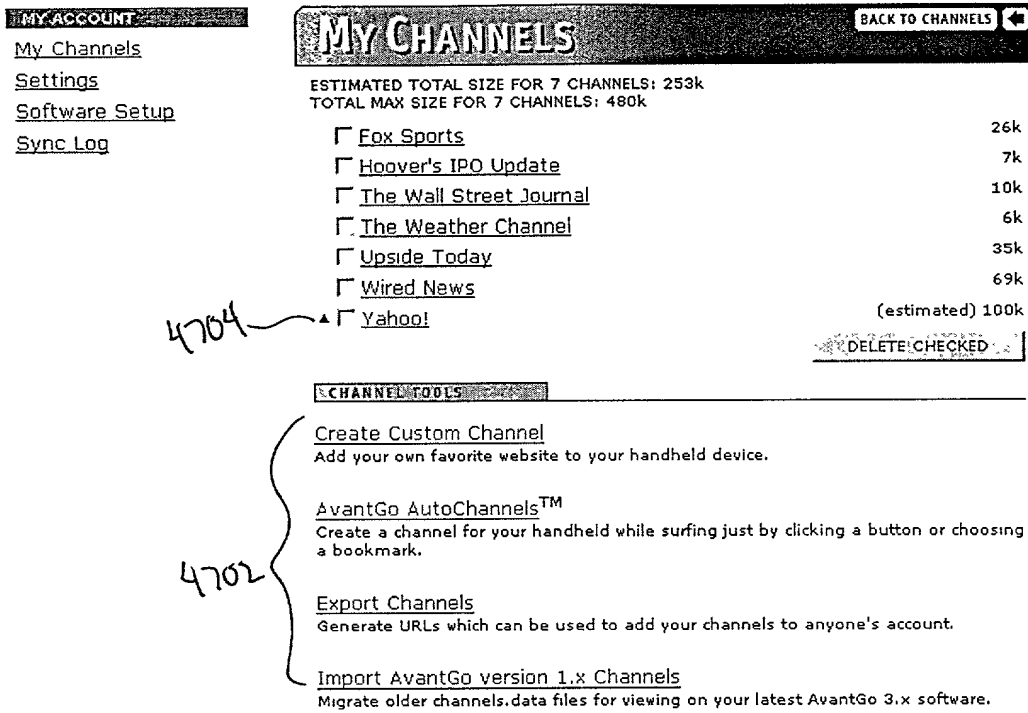


FIG. 47

MY ACCOUNT

[My Channels](#)

[Settings](#)

[Software Setup](#)

[Sync Log](#)

ACCOUNT SETTINGS

[BACK TO CHANNELS](#) 

CHANGE PASSWORD

You will be asked to update changes to your device from this website.
If you've forgotten your password, you can [request a password reset](#).

Old Password:

New password:

Confirm password:

CHANGE EMAIL ADDRESS

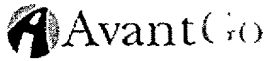
This is where password reset messages will be sent if you forget your username or password.

Password:

New email address:

FIG. 48

05897607-020304



Welcome, dkoeHN68

[Log out](#)

MY ACCOUNT

[My Channels](#)

[Settings](#)

[Software Setup](#)

[Sync Log](#)

SOFTWARE SETUP

[BACK TO CHANNELS](#)

- ▶ [Download AvantGo Palm OS Client \(Windows\)](#)
- ▶ [Download AvantGo Windows\(R\) CE Client \(Windows\)](#)
- ▶ [Download AvantGo Connect™ \(Macintosh\)](#)
- ▶ [Configure Mobile Application Link](#)

To check your AvantGo Client version:

Tap *Tools* > *About AvantGo* on CE

or

Menu > *Options* > *About AvantGo* on Palm Devices.

The About AvantGo panel appears. On the bottom left is your version number.

[Update](#)

FIG. 49

FIG. 49

09897607-070304

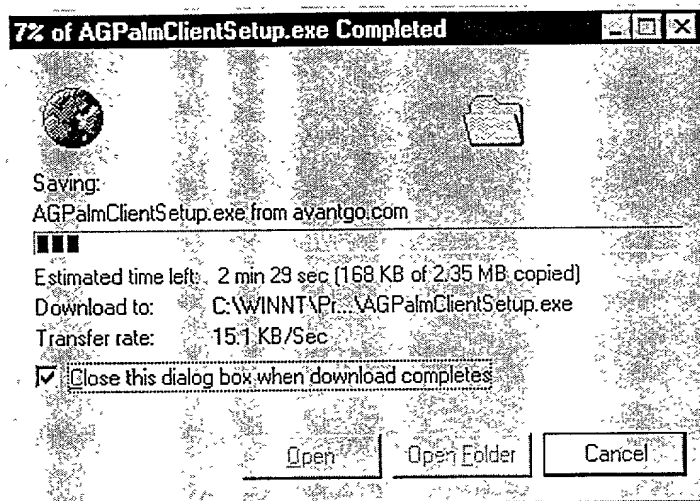


FIG. 50

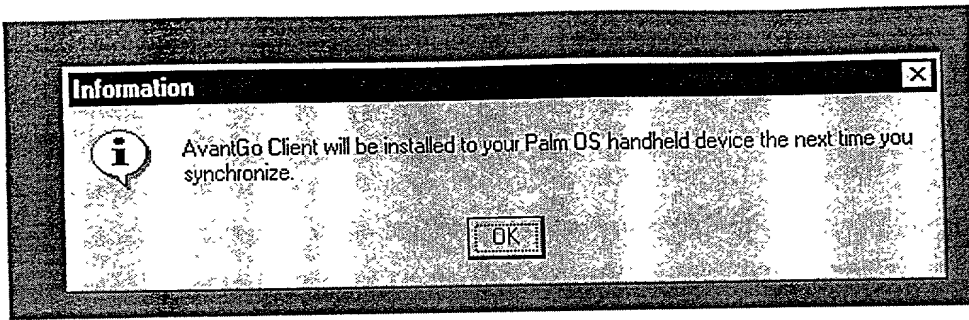
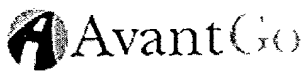


FIG. 51



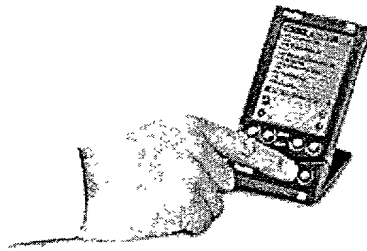
SETUP CHECKLIST

- DOWNLOAD
- ▶ INSTALL
- SYNCHRONIZE
- CREATE ACCOUNT
- CONFIGURE
- SETUP DEVICE

SYNCHRONIZE

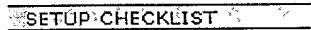
Place your device in its cradle and press the HotSync button.

When you synchronize, AvantGo 3.x will be installed on your device. After synchronization is complete, click the "Next" button at the bottom of the page.



NEXT>>

FIG. 52

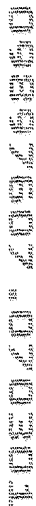


- ## USE EXISTING ACCOUNT?

Username: **dkoehn68**
Email: **dkoehn@avantgo.com**

- NEXT >>**

Fig. 53



- ▶ DOWNLOAD
- ▶ INSTALL
- ▶ SYNCHRONIZE
- ▶ RENTS AMOUNT
- ▶ CONFIGURE
- ▶ SYNCHRONIZE

Click the link below to configure Mobile Link™

By clicking below, you will ensure your AvantGo 3.x software is communicating properly with AvantGo's servers.

**CLICK HERE
TO CONFIGURE**

5402

NEXT >>

FL6. 54

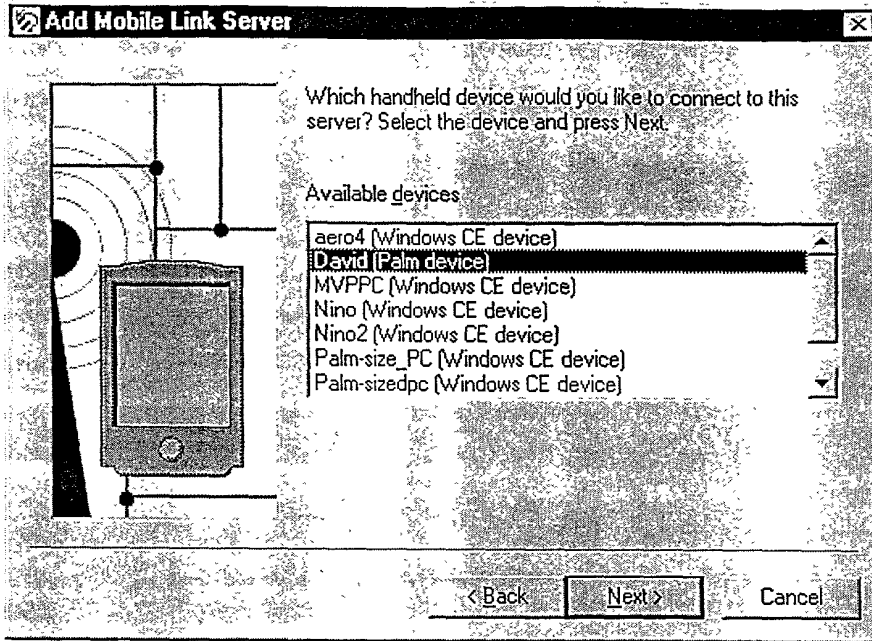


FIG. 55

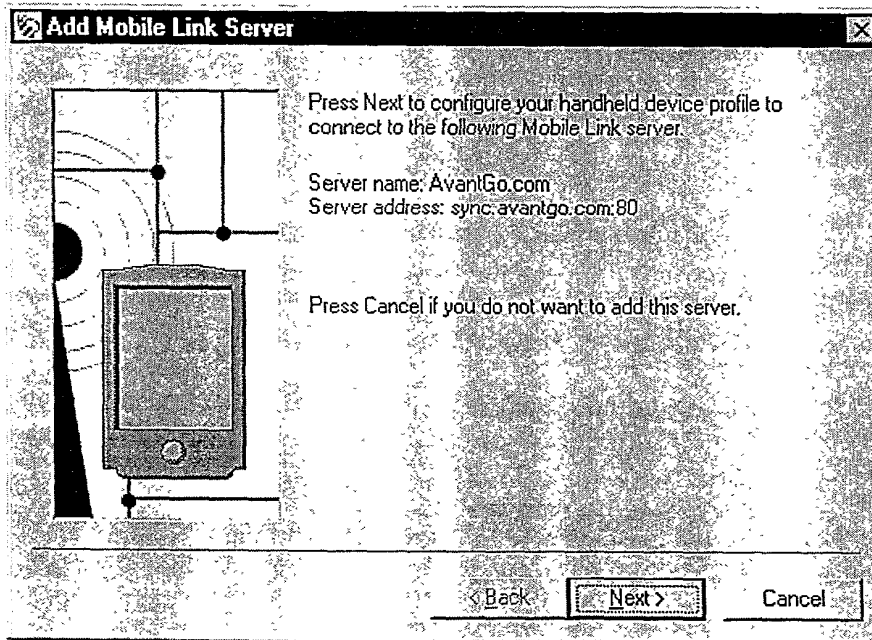


FIG. 56

09897507 070304

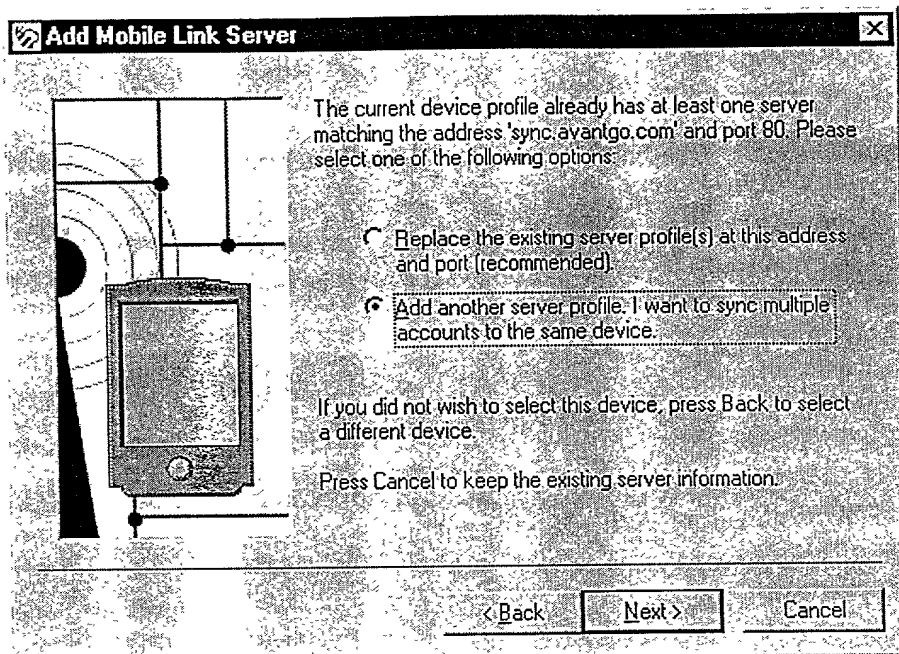


FIG. 57

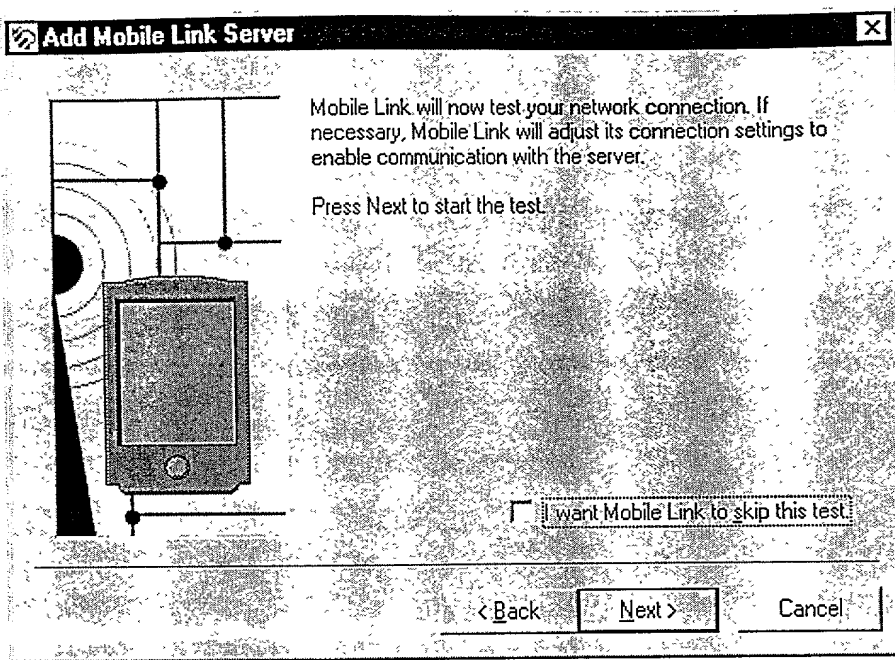


FIG. 58

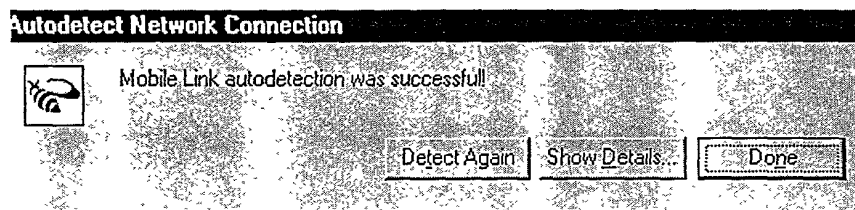


FIG. 59

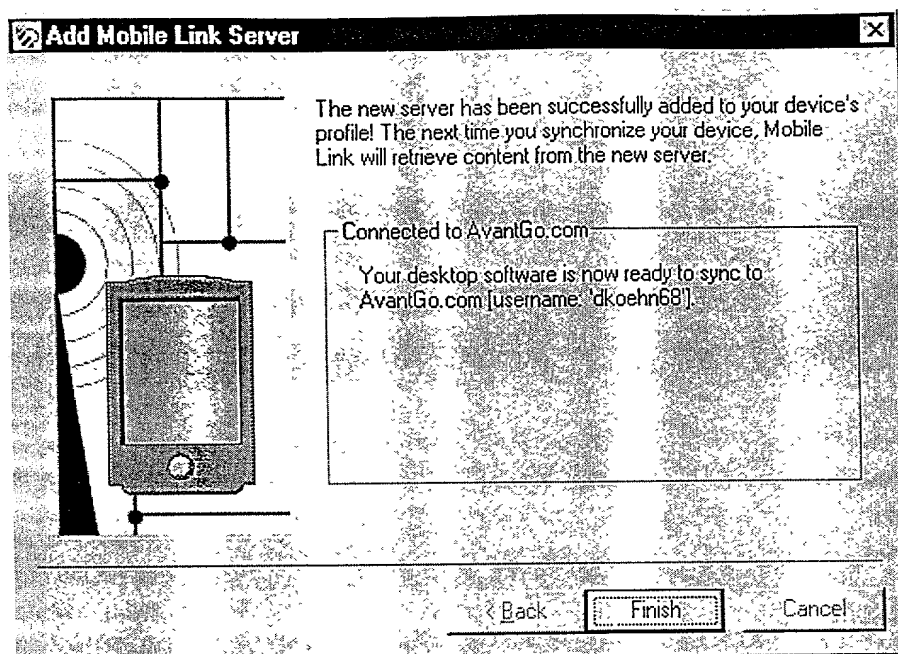
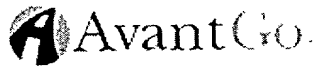


FIG. 60



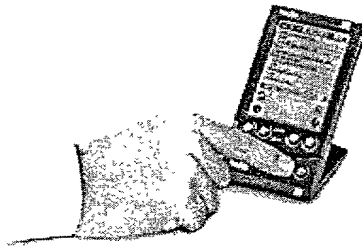
SETUP CHECKLIST

- 1. DOWNLOAD
- 2. INSTALL
- 3. SYNCHRONIZE
- 4. CREATE ACCOUNT
- 5. CONFIGURE
- ▶ SYNCHRONIZE

SYNCHRONIZE

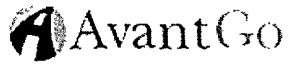
Place your device in its cradle and press the HotSync button

When you synchronize, your AvantGo 3.x software will connect to the Avantgo servers for the first time. After synchronization is complete, click the "Next" button at the bottom of the page.



NEXT >>

FIG. 61



SETUP CHECKLIST

- DOWNLOAD
- INSTALL
- SYNCHRONIZE
- CREATE ACCOUNT
- CONFIGURE
- SYNCHRONIZE

CONGRATULATIONS!

You are now an AvantGo user

Pick up your device, click on the "applications" button and select AvantGo to begin navigating channels. Use the links below to begin navigating AvantGo.

CHANNELS

Choose from 1000s of exciting channels from leading providers

ACCOUNT

View and edit your personalized account settings

FINISH >>

FIG. 62

6302

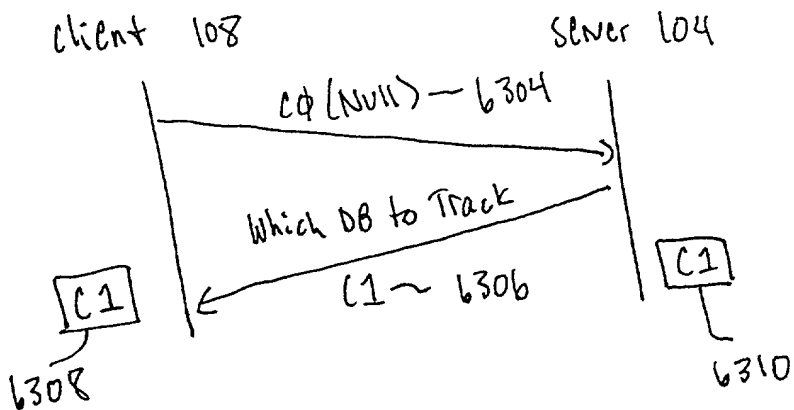


FIG. 63A

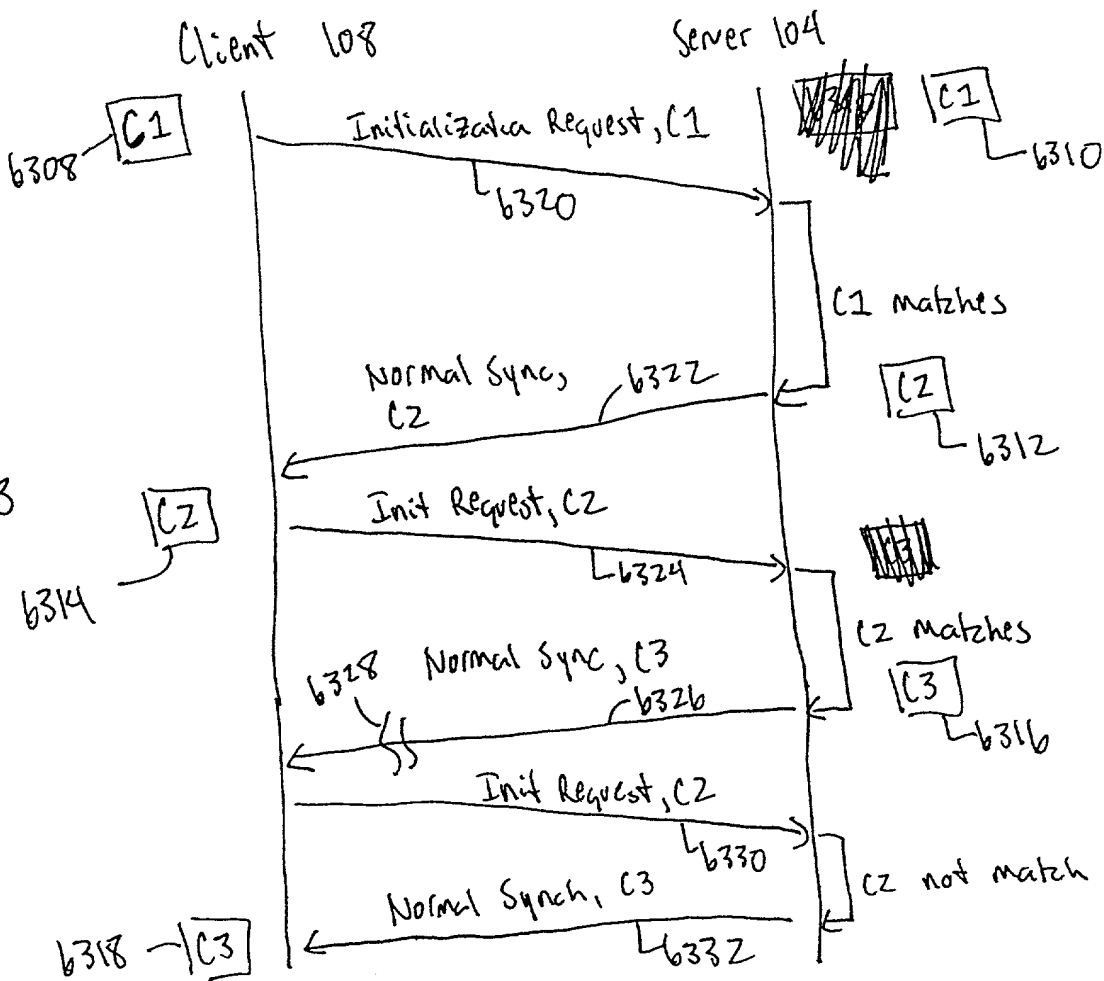


FIG. 63B

09897507.00301